MARLBOROUGH DISTRICT COUNCIL

PROPOSED MARLBOROUGH ENVIRONMENT PLAN

Volume 3

Appendices

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Appendix 1

Values contributing to areas with outstanding natural features and landscapes and areas with high amenity value

Abbreviations:

DOC – Department of Conservation

ONL – Outstanding natural landscape

ONF – Outstanding natural feature

Areas with outstanding landscape values

Marlborough Sounds Outstanding Natural Features and Landscapes

1. Outer Sounds Landscape	
Biophysical Values	- Northernmost part of the highly legible drowned narrow ridge system, noticeably at Cape Jackson. - Numerous Geopreservation Sites of National and Regional Importance, including the submerged ridgeline under French Pass. - Nationally significant seascape (Cook Strait). - Swirling high flow currents of French Pass, Allen Strait, and Tory Channel. - Salt tolerant low growing herb and shrub species. - Island communities nationally and internationally important with distinct rare biotic assemblages (i.e. Motuara, Brothers and White Rocks, Long Island Kokomohua). - Many predator-free island sanctuaries (Motuara Island, Blumine Island and Stephens Island/Takapourewa Island). - Extensive areas of vegetated elevated slopes, notably of D'Urville, Mt Stokes, Mt Furneaux, Bobs Peak. - Extensive areas of modified grasslands. - Subalpine vegetation of Mt Stokes. - Nationally significant broadleaf species and nationally significant endemic cliff vegetation on Arapawa Island.
Perceptual Values	- Expansive views of the open sea broken up by the outer peninsulas, rocky outcrops, steep exposed seacliffs and islands. - Exposed, remote and rugged seascape. - All islands have very low modification levels. - High legibility and visual coherency of the grasslands on the drowned ridge coastline. - High sensory values associated with the wild windswept coast and high winds, rough sea, high-energy waves and associated sea spray. - Very high levels of perceived naturalness due to limited modification. - Impressive and weathered coastal cliffs and rocky windswept islands. - Prevalent high winds from Cook Strait and extreme weather conditions providing highly transient conditions.

1. Outer Sounds Landscape	
Associative Values	- Rich in past Māori and European cultural use including prehistoric quarries and copper mines, whaling and pa sites. - Strong tangata whenua association and spiritual affinity with outer Sounds seascape and coastline. Many linked to Kupe's visit. - Noted 'entrance points' into Tory Channel, Queen Charlotte Sound and Pelorus Sound. - Strong recreational areas, including walking, boating, fishing and diving. - Noted DOC conservation areas.
Overview	Based on the above values, the Outer Sounds Landscape has been identified as an ONL due to its exceptional biophysical and associative landscape values and very high sensory landscape values. The Outer Sounds Outstanding Natural Landscape comprises the open waters and series of islands and exposed peninsulas, headlands and bays that extend out into Cook Strait and Tasman Bay. This landscape encapsulates the wide variety of rugged, often windswept landforms, which are imbued with rich cultural and historical associations. Perceptually the Outer Sounds Outstanding Natural Landscape provides uninterrupted open seascape vistas of the very end of this drowned landscape. This area of the Marlborough Sounds is the least modified. It contains some of the District's most important predator-free islands holding outstanding levels of natural character.

2. D'Urville Island/Rangitoto Ki Te Tonga Including French Pass	
Biophysical Values	- The island has a unique ultramafic 'mineral belt' that traverses the length of the island. As a result of this mineral belt, unique vegetation flourishes. - Geopreservation sites include: D'Urville Island copper mines; prehistoric argillite quarries; Paddock Rocks; Greville Harbour sand dunes and coastal features; Greville Harbour boulder spit; French Pass submerged ridgeline and equalising waters; Mt. Ears prehistoric argillite quarry and Cape Stephens wind-funnelled sand dune. - A large proportion of indigenous land cover from coast to mountain tops, including lowland forest, is intact; and is one of the largest tracts of indigenous vegetation cover remaining in Marlborough. - There are numerous other biotic communities that include dune, spit, beach, lagoon, freshwater wetland, estuarine and alluvial that are all very distinctive and rare in the Marlborough Sounds. - Very strong currents occur in the vicinity of French Pass with dangerous eddies and undercurrents with strong tidal mixing. - There are abundant populations of native fish found around the island's waters and indented coves and harbours. - There are also native freshwater fish within D'Urville Island's freshwater ecosystems. - Minimal land and marine development with highly natural coastline. - French Pass contains a largely unmodified near-shore coastal marine environment with very sheltered shores. - High flow habitats are associated with Current Basin and French Pass. - Rocky outcrops are a feature of south western D'Urville Island. - The vegetated elevated slopes of central D'Urville Island illustrate one of the most extensive and exceptional tracts of lowland forest in the District. This tract, coupled with the largely unmodified marine environment and the waters of French Pass all hold outstanding levels of natural character. The remaining parts of D'Urville Island hold high and very high levels of natural character.

2. D'Urville Island/Rangitoto Ki Te Tonga Including French Pass	
Perceptual Values	- Attractive harbours with sheltered intimate bays and calm waters. - Many visually interesting landforms such as D'Urville Peninsula and the waters at French Pass. - Key views to narrow passage and currents at French Pass from Channel and Collinet Points. - Exposed and dramatic western coastline including long-distance seascape views to adjacent islands. - The waters of French Pass are visually dramatic due to their strong current movement. - The submerged ridge at French Pass forms a distinctive reef. - Minimal land and marine development with highly natural coastline. High experiential values associated with remoteness and lack of modification.
Associative Values	- French connection - named after French Admiral Dumont D'Urville who sailed the *Astrolabe* through French Pass and just barely managed to get through. - Large proportion of DOC land. - Eco-tourism destination. - Historic development of argillite quarries to extract argillite for cutting tools and the importance of that resource to local tribal identity. - Early copper mines. - Early Māori settlement and activities. - Early European whaling and farming activities. - Heritage New Zealand plaque commemorates Captain Cook's last anchorage point in New Zealand in Whareata Bay.
Overview	Based on the above values, all of D'Urville Island / Rangitoto Ki Te Tonga including French Pass have been identified as ONFs within the Outer Sounds ONL due to their exceptional biophysical and associative landscape values and very high sensory landscape values. D'Urville Island (Rangitoto Ki Te Tonga) is the largest island in the Sounds and the eighth largest island in New Zealand. Situated at the northern extremity of the Sounds, it is separated from the mainland by French Pass. The submerged ridgeline under French Pass, a geopreservation site, causes unusually swift tidal currents that are highly legible and fascinating to watch. Other geopreservation sites identified on the Island include a cluster of argillite source sites. These have important archaeological values due to their potential to provide information about the extractive techniques used to obtain the stone material and to better understand New Zealand prehistory and cultural change. The location of argillite quarries appears in at least one legend that tells the story of the flight of Poutini (the taniwha of the god Ngahue) from Whatini. Each place of refuge identified in the story relates to a stone resource location including Tahanga, Mayor Island and D'Urville Island, thereby serving as a form of oral map of source sites. Considerable archaeological evidence and documentation remains to tell of the Island's rich Māori and European history, including connections with two early European explorers, D'Urville and Cook. Although much of the Island was cleared by early European settlers, approximately a third of it remains in native bush today. Much of it is managed as conservation land and has significant ecological values, enjoyed by the Island's few residents and its visitors, who are drawn to its remote and highly natural setting. Modifications include the following: Sounds Residential zoning at Kapowai Bay and Whareata Bay; buildings; access roads; power lines; jetties; forestry; and vegetation clearance. Moorings are scattered along the bays within the coastal area, there are marine farms within Catherine Cove and a lighthouse within Middle Bank Reef, French Pass. The French Pass settlement is excluded.

3. Rangitoto Islands, Stephens Island and Trio Islands	
Biophysical Values	- Highly exposed islands, which have steep and exposed sea cliffs and wind-swept rocky coastlines. - The islands are above-water remnants of ancient ridges and spurs directly associated with the drowned valley system, which formed the Marlborough Sounds; comprising of strata and schist. - Stephens Island is predator-free. - Jag Rocks/Nga Kiore support some of the largest habitats for the brachiopod community and is of national significance. - The isolated Trio Islands are habitat for tuatara, king shag and are also predator-free. - All islands hold very low level of modification. - Islands contain endemic herbfields and tussock communities. - All islands and their associated coastal waters harbour unique species and hold outstanding levels of natural character.
Perceptual Values	- Spectacular rugged coastal cliff features on Rangitoto and Stephens Islands. - The outer islands are the most exposed to the sea of any areas in the Sounds and act as visual reference points from Cook Strait. - Strong currents sweep through Stephens Passage. - Low modification of water environments. - Sense of remoteness.
Associative Values	- A radar station was established on Stephens Island during World War Two. - Diving and fishing.
Overview	Based on the above values, the Rangitoto Islands, Stephens Island, Trio Islands and Jag Rocks have been identified as ONF's within the Outer Sounds ONL due to their exceptional biophysical and associative landscape values and very high sensory landscape values. These isolated islands at the northern to north-eastern tip of D'Urville Island display exceptional characteristics that are clearly linked with the area's exposure to the sea. Their weathered sea-cliffs and hardy vegetation, tilted from the wind, are highly expressive of their exposed maritime position and are highly memorable. The area is visited by divers and fishing expeditions. Sea conditions range from very exposed around northwestern D'Urville and Takapourewa (Stephens Island) to exposed further south-east at Trio Islands. Stephens Passage between Stephens Island and D'Urville Island is noted for its extremely strong currents. Takapourewa (Stephens Island) is particularly noteworthy for its complex reef habitats and high diversity of macroalgae, invertebrates and fish. The island is predator-free and supports many nationally threatened species including New Zealand's largest population of tuatara. The smaller Trio Islands are also predator-free, supporting populations of tuatara and king shag. Jag Rocks/Nga Kiore is one of many rock stacks off the coastline of D'Urville Island but is particularly noteworthy as the rocks support some of the largest New Zealand brachiopod communities, which are of national significance. Spectacular cliff formations are also clearly legible on the Rangitoto and Stephens Islands. Modifications (mostly on Stephens Island) include: some vegetation clearance; buildings; a lighthouse on Stephens Island; and occasional tracks and moorings.

4. Chetwode Islands, Titi Island and Sentinel Rock	
Biophysical Values	- Highly exposed islands, which hold steep and exposed sea cliffs and wind-swept rocky coastlines. - The Chetwode Islands are considered the most ecologically significant predator-free islands in the Sounds, harbouring the yellow-crowned parakeet, robin, kaka, rare vegetation species and coral reef habitat for a high diversity of fish species. - Titi Island and Sentinel Rock are also of national significance due to their predator-free status. - All islands hold very low level of modification. - The islands contain endemic shrublands, herbfields and tussockland communities. - All islands and their associated coastal waters harbour unique species and support no or very low levels of modification. All hold outstanding levels of natural character.
Perceptual Values	- Many spectacular rock stacks are present at the southern end of the Chetwode Islands. - The outer islands are the most exposed to the sea of any areas in the Sounds and act as visual reference points from Cook Strait. - Rugged and exposed in appearance.
Associative Values	- A number of Māori pits, middens and terraces are located on the Chetwode Islands.
Overview	Based on the above values, the Chetwode Islands, Titi Island and Sentinel Rock have been identified as ONF's within the Outer Sounds ONL, due to their exceptional biophysical and associative landscape values and very high sensory landscape values. The Chetwodes, Titi Islands and Sentinel Rock are characterised by their rugged, exposed isolation. These waters are infrequently visited and are amongst the most remote in the Sounds. The islands themselves have a very low level of modification, containing endemic vegetation and are surrounded by numerous offshore reefs. A number of Māori pits, middens and terraces are located on the Chetwode Islands. Both the Chetwodes and Titi Island are Department of Conservation Nature Reserves, are both of national significance and are predator-free. The Chetwodes are the most ecologically significant islands in the Sounds, harbouring the yellow-crowned parakeet, robin, kaka, rare vegetation species and coral reef habitat for a high diversity of fish species. Modifications include a lighthouse at Ninepin Rock (Chetwode Islands).

5. Port Ligar, Forsyth Island and Kaitira Headland	
Biophysical Values	- Where the waters of exposed Cook Strait and more sheltered Pelorus Sound meet. - Areas within Forsyth Bay and Waitata Reach, including Port Ligar have been identified as being of national significance for king shag feeding and breeding habitat, including Duffers Reef. - Bird Island is nationally significant for reef heron breeding. - Both Forsyth Island and the Kaitira headland hold high levels of natural character. The open waters between Port Ligar, the Kaitira headland and northern Forsyth Island also hold high levels of natural character, principally due to low levels of modification.
Perceptual Values	- Rugged, exposed outer coastal slopes and narrow isthmus landform at Port Ligar. - Interesting landform of Duffers Reef and the neck at the head of Forsyth Bay. - Dramatic pinch point at Allen Strait in to Forsyth Bay. - Visually dramatic headland of Clay Point.

5. Port Ligar, Forsyth Island and Kaitira Headland	
Associative Values	- Recognised entry/exit point of Pelorus Sound between Kaitira (East Entry Point) and Te Akaroa (West Entry Point). - Evidence of early Māori settlement clustered around Port Ligar and Orchard Bay including a Pa. - Evidence of early European settlement at Port Ligar. - Te Kopi and Sir Bernard Fergusson Scenic Reserves in Waterfall Bay, Port Ligar, Bulwer Scenic Reserve in Waitata Bay. - Historic gun emplacement at Post Office Point on the Kaitira headland. - Private Forsyth Island is a destination for travellers.
Overview	Based on the above values, Port Ligar, Forsyth Island, the waters between Te Akaroa and the Kaitira headland and Bird Island have been identified as ONF's due to their exceptional biophysical and associative and very high sensory landscape values. The rugged, exposed outer coastal slopes and peninsulas give way to the more sheltered embayments of Port Ligar and Forsyth Bay at the entry to Pelorus Sound. Identifiable features include the rugged, narrow isthmus landform at Port Ligar, the interesting landform of Duffers Reef, a chain of small islands and stacks off the north-western tip of Forsyth Island and the neck at the head of Forsyth Bay. The narrow pinch point of Allen Strait, between southern Forsyth Island and the mainland, forms a visually enclosing entrance into Forsyth Bay. Whilst some land has been cleared for pasture, there are limited structures on the land, especially around northern Port Ligar. Waterfall Bay features native vegetation of local value, fragmented bird habitat and some uncommon plant species. Duffers Reef is a nationally significant nesting area for king shags. Areas within Forsyth Bay and Waitata Reach, including Port Ligar have also been identified as being of national significance for king shag feeding and breeding habitat. Bird Island is nationally significant for reef heron breeding. Modifications include: moorings; marine farms adjacent to the Port Ligar headland, extending to Makata Rock; vegetation clearance; forestry; roads and tracks; jetties; buildings; and power lines.

6 Maud Island, Mt. Shewell, Fitzroy Bay and Eastern Tawhitinui Reach	
Biophysical Values	- Mt. Shewell is nationally significant for Powelliphanta hochstetteri obscura (New Zealand giant snail) and diverse plant species. - Maud Island is internationally significant, as a predator-free island sanctuary, harbouring nationally threatened species of invertebrates, birdlife and the entire population of the Maud Island frog. - Fitzroy Bay - nationally significant beech forest/lowland/coastal broad leaf and internationally significant waters. - Largely intact podocarp-broadleaf forest in Kauauroa Bay (eastern Tawhitinui Reach). - Maud Island largely cloaked in regenerating shrubland and forest. - Remnant indigenous forest on the elevated slopes of Mt Drew. - Maud Island is a visually striking, unique landform and holds outstanding natural character. - Fitzroy Bay, Mt. Shewell and parts of Kauauroa Bay hold very high levels of natural character due to the indigenous bush cover. The remaining areas hold high levels of natural character.

6 Maud Island, Mt. Shewell, Fitzroy Bay and Eastern Tawhitinui Reach	
Perceptual Values	- Impressive peak of Mt Shewell at the head of Admiralty Bay. - Interesting distinct pyramidal form of Maud Island. - Low levels of modification. - Road to Admiralty Bay/French Pass passes through the bush above Fitzroy Bay – contributing to the scenic journey. - Frequent, intimate bays with sheltered waters, notably Fitzroy Bay/Savill Bay/Garne Bay/Waiona Bay and Kauauroa Bay. - Area typified by slender peninsulas (notably Tawero and Whakamawahi Points) and broad bays. - Visually impressive Yellow Cliffs at the southern head of Waitata Bay.
Associative Values	- Historic gun emplacement on Maud Island. - Peninsulas of Tawero Point and Whakamawahi Point act as gateway features to central Pelorus Sound.
Overview	Based on the above values, Maud Island, Mt Shewell, Fitzroy Bay and Eastern Tawhitinui Reach, have been identified as ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values. Maud Island is an important island sanctuary containing nationally threatened species. The island landform provides a distinctive pyramidal skyline linking to the slender neck of Harter Point. Most of the Island is cloaked in regenerating shrubland and forest. Māori settlement and use of the resources in this part of the outer Sounds is evident in the intense clusters of archaeological remains. The impressive peak of Mt Shewell, the sheltered waters of Apuau Channel and intimate bays of this coastline are highly legible. Of the remaining indigenous forests within the area, much appears on more elevated slopes (Mt.Shewell) and the western slopes of Waiona Bay and around the elevated slopes of Fitzroy Bay. The continuous undeveloped coastline in this area is highly natural. Mt Shewell Scenic Reserve features nationally significant, diverse plant species. Modifications include: vegetation clearance; forestry and tracks on Maud Island; buildings; jetties; tracks; and limited moorings adjacent to marine farms around Tawhitinui Reach.

7. Islands of Croisilles Harbour and Northern Coastline	
Biophysical Values	- Geopreservation site: Matarau Point beach ridges. - Geopreservation site: Pakiaka Point boulder bank and lagoon. - Nationally significant ecological values on Croisilles Islands (Motuanauru, Moukirikiri and Otuhaereroa Islands). - Nationally significant ecological values of the cuspate forelands at Matarau Point. - Nationally significant ecological values of island communities, with distinct and rare biotic assemblages. - The marine environment and islands of Croisilles Harbour and part of the northern coastline hold outstanding levels of natural character. The remaining coastal waters of the northern bays (Taipare Bay and Papawai Bay) and Askews Hill hold very high levels of natural character.

7. Islands of Croisilles Harbour and Northern Coastline	
Perceptual Values	- Scenic bush pockets and key viewpoints to D'Urville Island and French Pass. - Prominent/distinctive coastal ridgelines to Askews Hill. - Impressive sequence of rugged, exposed bays and open waters along northern coastline. - High levels of naturalness due to limited modification. - Cape Soucis/Raetihi and Askews Hill, including the water, form the impressive entrance to Croisilles Harbour.
Associative Values	- Numerous Māori archaeological sites, notably around the islands.
Overview	Based on the above values, Islands of Croisilles Harbour and Northern Coastline have been identified as ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values. Croisilles Harbour opens into Tasman Bay and is the westernmost part of the mainland Sounds. The area's key values relate to the number of geopreservation sites and ecologically significant areas, which are expressive of the coastal location and are also valued for the important habitat they provide. At the outer, rugged and exposed coastline, prominent and distinctive costal ridgelines extend from Okuri Point southwards to Askews Hill. Whilst some of this land is cleared or planted in exotic forestry, there are intact indigenous forests on the more elevated slopes of Askews Hills, Bobs Peak and Okuri Peak. A rare, nationally important altitudinal sequence from ridgetop to seafloor exists at Big Bay. The geopreservation sites include the Matarau Point beach ridges and the Pakiaka Point boulder bank and lagoon, both at the base of Askews Hill at the eastern entrance of Croisilles Harbour. The Pakiaka Point boulder bank and lagoon shelters largely intact herbfield and salt marsh communities, extensive sand/mud flat habitats and sinuous tidal channels. The cuspate forelands at Matarau Point have been identified as having ecological values of national significance. Also identified as nationally significant are, the Croisilles Islands for a range of ecological values. Motuanauru Island and Otuhaereroa Island have distinct and rare biotic assemblages, which are highly productive. The waters surrounding the islands exhibit high levels of naturalness due to limited modification to the waterbody. The Islands create a highly natural, bush-clad visual entrance to Croisilles Harbour and are unmodified. Modifications include: tracks and power lines; cleared vegetation and pasture; forestry; and buildings.

8. Whangarae Inlet and Okiwi Bay	
Biophysical Values	- Geopreservation site: Whangarae Bay estuary and sand pits. - Nationally significant ecological values in Whangarae Bay associated with the relatively unmodified estuarine habitat. - The Whangarae Estuary is the only spit-formed estuary in the Marlborough Sounds. - Whangarae Bay, Cape Soucis/Raetihi and the elevated parts of Croisilles Hill, Elliott Peak, Editor Hill and Matapehe hold outstanding levels of natural character due to their upland intact vegetation assemblages. The remaining area (except Symonds Hill, which holds high natural character) retains very high levels of natural character.

8. Whangarae Inlet and Okiwi Bay	
Perceptual Values	- Impressive sequence of rugged, exposed bays. - Impressive enclosing headlands of Symonds Hill and Goat Hill to Okiwi Bay. - Visually dramatic headland of Cape Soucis/Raetihi demarcates south-western boundary between Marlborough and Nelson. - High levels of naturalness due to limited modification.
Associative Values	- Sheltered bay notable for holiday and recreational pursuits.
Overview	Based on the above values, Whangarae Inlet and Okiwi Bay have been identified as ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values. The southern shores of Croisilles Harbour have a number of identifiable features. The exposed, prominent rugged headland of Cape Soucis/Raetihi forms Marlborough's south-western extent, whilst the impressive enclosing headlands of Clock Point Hill, Goat Hill and Symonds Hill enclose Whangarae Bay and Estuary and Okiwi Bay. The Okiwi Bay bach settlement is the main area of settlement in Croisilles Harbour, and popular as a haven for recreational activities including diving, watersports and fishing in the sheltered waters of the harbour and beyond. The forested ridges of the northern Rai River catchment form a mountainous fringe to this area, extending southwards from the Whangarae Estuary and Okiwi Bay to North Castor Peak at the end of the Bryant Range and Elliott Peak at the end of the Bull Range. Intact upland vegetation is evident on the slopes above Okiwi Bay, and a finger of this extends to the coast near Taiwhati Point. Despite a history of land clearance and farming around its margins, Whangarae Estuary is an excellent example, in the context of Marlborough, of a relatively unmodified estuary. The only spit-formed estuary in the Marlborough Sounds, Whangarae Estuary is a habitat for several regionally rare birds including banded rail and fern bird. Outside of the estuary, the Croisilles Harbour marine environment supports a unique shallow sand community notable for the presence of the New Zealand lancelet (the southern-most population of this patchily distributed species). Modifications include: cleared vegetation; tracks; forestry; roads; buildings; a jetty; marine farms; and limited moorings.

9. Tennyson Inlet and Northern Nydia Bay	
Biophysical Values	- Nationally significant intertidal and subtidal areas - wetlands habitat. - Nationally significant broad leaf/beech forest and bird habitat. - Very high degree of coastal natural character along the majority of Tennyson Inlet. - Nationally significant vegetation flanking the northern side of Nydia Bay. - Nationally threatened plants on Tennyson Inlet islands (Tawhitinui Island, Awaiti Island and Tarakapia Island). - Tennyson Inlet and Nydia Bay support some of the largest tracts of lowland coastal forests in Marlborough. Nationally important altitudinal sequences of primary forest from ridgetop to sea floor. - The majority of Tennyson Inlet and northern Nydia Bay hold outstanding levels of natural character due to the exceptional tract of unmodified indigenous forest from ridgetops to seafloor.

9. Tennyson Inlet and Northern Nydia Bay	
Perceptual Values	- Vegetated southern backdrop ridge from Kaiuma Saddle to Mt. McLaren. - Tennyson Inlet is an attractive deep, enclosed bay with bush to shoreline and frequent, intimate bays with sheltered waters. - Integrity of bush throughout Tennyson catchment – lack of development and coherency of landscape/seascape catchment. - Scenic road journey over Opouri Saddle into Tennyson Inlet. - Nydia Bay has a largely unmodified section of coast from the head of Nydia Bay to Jacobs Bay. - High experiential values due to unmodified vegetation cover.
Associative Values	- Almost entire Tennyson catchment is DOC land. - The dolphin, Pelorus Jack, accompanied ships between French Pass and the entrance to Pelorus Sound and was the first dolphin in the world to be protected by law. - The Nydia Track connects Tennyson Inlet with Kaiuma Bay, north of Havelock through mainly forested slopes.
Overview	Based on the above values, Tennyson Inlet and Northern Nydia Bay have been identified as an ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values. The coastline is moderately dissected with numerous large, deeply indented inlets such as Tennyson Inlet and Nydia Bay between large and prominent headlands. Today, the area's upland forest communities and estuaries are still largely intact. Original forests are featured on lower altitude hillslopes and toe slopes, and coastal forests are largely intact in Tennyson Inlet, and from Nydia Bay to Fairy Bay. The area features a vegetated southern backdrop from Mt. McLaren in the west to Kaiuma Saddle in the east. Tennyson Inlet provides a coherent natural landscape/seascape interface. The inlet's intertidal/ subtidal areas, its broadleaf/beech forest and altitudinal sequences of primary forest from ridgetop to sea floor are considered a nationally significant broad leaf/beech forest and bird habitat. Nationally threatened plants are also present on Tennyson Inlet islands and the intertidal and subtidal areas of wetland habitat at Tennyson Inlet are also considered nationally significant. Tennyson Inlet is an attractive deep, enclosed bay with bush to shoreline and frequent, intimate bays with sheltered waters. Almost the entire Tennyson Inlet catchment is DOC land and has high experiential values due to unmodified vegetation cover. Although largely unmodified, the area is accessed by land via the scenic road journey over Opouri Saddle into Tennyson Inlet or via the Nydia Track, which connects Tennyson Inlet with Nydia Bay. Modifications include: vegetation clearance and pasture; roads; buildings; power lines; and moorings and jetties. The Duncan Bay and Penzance Bay settlements are excluded.

10. Havelock (Pelorus) Estuary, Mt Cawte and Northern Hills	
Biophysical Values	- Pockets of nationally significant broad leaf/beech forest. - Attractive areas where native bush remains dominant, particularly where it extends from hilltops to water's edge and where forestry and other signs of development are less evident, such as Kaiuma Saddle and Mount Cawte. - Geopreservation site: Pelorus and Kaituna river deltas. - High estuarine values throughout the complex estuarine delta system at the head of Pelorus Sound (Kaituna/Pelorus and Mahakipawa), which supports extensive saltmarsh and invertebrate communities. - Important fresh water wetland communities adjoining estuarine areas. - Havelock estuary (or Pelorus River estuary) holds outstanding levels of natural

10. Havelock (Pelorus) Estuary, Mt Cawte and Northern Hills	
	character due to its distinctive intact remnant alluvial communities. Kaiuma Saddle and associated ridges and the southern flanks of Mt. Cawte hold very high levels of natural character. Putanui Point and elevated lands around Havelock retain high levels of natural character.
Perceptual Values	- Interesting coastal interface of tidal flats formed by river deltas at Havelock. - Scenic setting of township amongst native bush at water's edge, with boat activity. - Memorable intertidal delta and network of waterways. - The Havelock (Pelorus River estuary) is the largest estuarine area in the Marlborough Sounds. It retains many of its natural qualities. - Putanui Point, with its regenerating lands vegetation cover, is prominent.
Associative Values	- Cluster of early Māori and European archaeological sites in and around Kaiuma Bay. - The Nydia (walking) Track connects Tennyson Inlet with Kaiuma Bay, north of Havelock through mainly forested slopes. - Noted boating area around Havelock with access to waters of western Marlborough Sounds.
Overview	Based on the above values, Havelock estuary, Mt Cawte and Northern Hills have been identified as ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values. The sheltered waters, their tidal influence, and the bustling boating activity around Havelock contribute to the aesthetic, shared and recognised, heritage and ecological values of the area. The two river deltas that drain into the Sounds are particularly highly valued as geological features, however they also have high legibility, aesthetic and transient values as the rise and fall of the tide dramatically changes their appearance and that of the wider valley. A geopreservation site is present at the Pelorus and Kaituna river deltas, where a complex estuarine delta system also supports important freshwater wetland communities including extensive saltmarsh and invertebrate communities. There are areas of significant broadleaf/beech forest on the upland slopes and an altitudinal sequence from ridge to water's edge is present at Mt Cawte and Kaiuma Saddle. Modifications include: roads and tracks; power lines; limited moorings; dredging of Havelock Estuary; and increased presence of boat traffic.

11. Forested Ridges around Crail Bay	
Biophysical Values	- Bobs Knob Scenic Reserve – nationally significant for plant and animal diversity (near Crail Bay). - Nationally threatened Powelliphanta hochstetteri obscura (New Zealand native giant snail) on western ridge of Pelorus Sound. - Extensive upland forest, notably at the ridges and peaks. - Much of the forested ridges contain very high levels of natural character due principally to the indigenous, unmodified vegetation. - Very high terrestrial natural character at Yncyca Bay.
Perceptual Values	- Ridge dividing Kenepuru and Pelorus Sounds provides a vegetated backdrop to both waterbodies providing high levels of naturalness. - Several interesting peninsula landforms, including Hopai Bay, Kaiaho Point and the indented peninsula around St. Omer, Gold Reef Bay and Weka Point. Unmodified and slender Ouokaha Island extends off Hopai Peninsula and acts as a feature of this part of the bay.

11. Forested Ridges around Crail Bay	
Associative Values	- DOC reserve extends along the ridges of much of this area.
Overview	Based on the above values, the forested ridges around Crail Bay have been identified as ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values. Situated on the landform separating Pelorus Sound from Kenepuru Sound, the upland forested ridges of this area are largely under DOC management. Upland vegetation communities, including those of the Bobs Knob Scenic Reserve at the south-eastern head of Crail Bay, are nationally significant for plant and animal diversity. A large area of indigenous vegetation extends in places from Bobs Knob to the water's edge and, at the northern side of Kenepuru Sound, at St Omer Bay, Gold Reef Bay, Weka Point and Mills Bay. Distinctive peninsula landforms at Hopai Bay and Kaiaho Point are interesting and highly memorable. Modifications include: road (Kenepuru) and tracks; vegetation clearance; forestry; power lines; buildings; jetties and moorings; and the partial inclusion of a limited number of marine farms.

12. Cape Jackson, Cape Lambert and Alligator Head	
Biophysical Values	- Geopreservation site: Cape Jackson drowned ridge crest. - Cape Lambert headland vegetation, exceptional biodiversity on both Cape Lambert and Cape Jackson. - Steep eroded cliffs and rocky shores, dominated by high energy waves define this exposed landscape. - Cape Jackson, Cape Lambert and the interconnecting outer waters hold outstanding levels of natural character.
Perceptual Values	- Cape Jackson is a superb example of a drowned ridge crest. - Impressive ridgeline of the forested high peaks above Guards Bay and Port Gore, leading to Mount Stokes. - Cape Jackson, Cape Lambert and Alligator Head have wild and rugged forms that are extremely legible and assist in defining the two outer Sounds bays of Port Gore and Waitui Bay. - Largely unmodified coast. - Cape Jackson marks the western entrance to Queen Charlotte Sound. The lighthouse is very memorable and used as a reference point. - High experiential values, which are due to remote and expansive seascape vistas of a wild and exposed nature. - The darkness of the night sky adds to the sense of remoteness.
Associative Values	- Popular areas for open ocean fishing. - Headlands act as navigational landmarks for boaties.
Overview	Based on the above values, Cape Jackson, Cape Lambert and Alligator Head have been identified as ONF's due to their exceptional biophysical and associative landscape values and very high sensory landscape values. Steep eroded cliffs and rocky shores, dominated by high energy waves, define this exposed landscape. This is a largely unmodified section of coast, with exposed rocky bluffs, headlands and reefs. Cape Jackson, Cape Lambert and Alligator Head retain wild and rugged forms that are extremely legible, which assists in defining the two outer Sounds bays of Port Gore and Waitui Bay. Cape Jackson is a superb example of a drowned ridge crest and is a listed geopreservation site. Exceptional biodiversity is exhibited at Cape Lambert and in the threatened plants, remnant forest and regenerating

12. Cape Jackson, Cape Lambert and Alligator Head	
	native vegetation of Cape Jackson. The night skies here are some of the darkest in the country and add to the sense of remoteness. Access is primarily by boat, and the area is popular for fishing in the more exposed ocean waters. A privately maintained track (known as the Outer Queen Charlotte Track) extends from Ship Cove to the Cape Jackson lighthouse, providing direct land access with this exposed coastline, where expansive open ocean vistas are experienced. Cape Jackson lighthouse is very memorable and used as a reference point, marking the western entrance to Queen Charlotte Sound. An impressive ridgeline of forested high peaks above Guards Bay and Port Gore, leads to Mount Stokes, a prominent feature to this ONF. Due to the factors listed above, the outer peninsulas hold very high experiential and associative values. Modifications include: a lighthouse (Cape Jackson); vegetation clearance; tracks; power lines; buildings; and moorings. There are marine farms in Pig Bay. A small man-made breakwater is located at Anakakata Bay, south of Cape Jackson.

13. Mt. Stokes and surrounds	
Biophysical Values	- The highest peak and one of the most dominant landforms in the Marlborough Sounds, reaching 1,203metres a.s.l. - The slopes of Mt Stokes rises steeply, right from sea level. - Original forest covers most of the upper slopes of Mt Stokes and its summit supports the only occurrence of subalpine vegetation in the Marlborough Sounds. - The indigenous vegetation cover is internationally significant as it supports areas of alpine to coast vegetation sequences. - The natural biodiversity is high due to the range of altitude, landform and habitat. - Regionally outstanding primary podocarp-broadleaf forest between Ship Cove and Resolution Bay. - Mt. Stokes and its associated connecting peaks and ridges and Ship Cove and Resolution Bay hold outstanding levels of natural character due to regenerating bush and low modification. Remaining areas retain high and very high levels of natural character. - Mt. Furneaux is nationally significant for its podocarp/broad leaved forest.
Perceptual Values	- Impressive forested peak and ridges of Mt. Stokes rising above Endeavour Inlet. - The area straddles the inner and outer Sounds where extreme weather can also contribute to transitory and experiential values. - The area is particularly memorable where the level of modification is least. - The mountain top and ridges define and frame the associated bays and exhibit very high remote and experiential values.
Associative Values	- Ship Cove is described by DOC as an ‘icon’ site, where explorer James Cook once landed. - There are numerous Māori archaeological sites around the shores of Mt. Stokes, including many pa sites and middens and pre-historic stoneworks at Titirangi Bay. - Ship Cove is generally known as the start of the Queen Charlotte Track. - The sunken Mikhail Lermontov in Port Gore is one of the world's top wreck dives at 37m deep.

Overview	Based on the above values, Mt Stokes and Surrounds have been identified as ONF's due to the exceptional biophysical and associative landscape values and very high sensory landscape values. Mt. Stokes is one of the most dominant landforms in the Marlborough Sounds, with upland ridge crests and summits reaching 1,203 metres a.s.l. A number of watercourses that extend from this central massif have long, high gradients in which the water quality is amongst the highest in the Sounds. Original forest covers most of the upper slopes of the Stokes massif and its summit. The ONF supports the only occurrence of subalpine vegetation in the Sounds. Alpine to coast vegetation sequences descend from the summit in several locations throughout the ONF, including Titirangi Bay, Beatrix Bay at Te Puraka Point, Ship Cove, Port Gore and Endeavour Inlet. There are also numerous areas of regenerating native bush within lower parts of Port Gore, Guards Bay, Anakoha Bay and Beatrix Bay. Natural biodiversity is high due to the range of altitude, landform and habitat types, especially enhanced by subalpine communities. This is part of the larger Mt Stokes area managed by the Department of Conservation and is identified as having internationally significant ecological values. The area straddles the inner and outer Sounds, where extreme weather can also play an important aspect in the area's experiential values. The embayments encircling the central peak of Mt Stokes include some of the most recognisable areas in the Sounds, including Ship Cove, Endeavour Inlet and Port Gore. The impressive peaks and connecting ridges define and frame the bays and seascapes within this ONF and, due to their lack of modification, the area retains very high remote and experiential values. Key peaks surrounding Mt Stokes include Mt Kiwi, above Beatrix Bay, Mt Robinson and Grants Lookout immediately east of Mt Stokes, Mt Furneaux and Puzzle Peak and Oterawhanga, backing Port Gore. The waters around Endeavour Inlet have been identified as having nationally significant ecological values, particularly for Hector's Dolphin. Ship Cove, with it mature native bush setting, is described by DOC as an ‘icon’ site. The Queen Charlotte Track starts in this area – it is a popular, well-known walking/mountain biking track. There is considerable evidence of early Māori settlement/activity throughout the area, a notable site being the stone workings at Titirangi Bay. As Captain Cook’s first landing point in the Sounds and point of sustained early European and Māori contact, Ship Cove is a key heritage site in the Sounds. Archaeological sites also feature at Endeavour Inlet, associated with later antimony workings. Modifications include: roads and tracks; power lines; cleared vegetation; buildings; jetties; and properties in Tawa Bay and Resolution Bay. There are marine farms at Te Puraka Point (Beatrix Bay). Residential areas within Endeavour Inlet and the Pines settlement are excluded from the ONF.

14. Arapawa Island and Tory Channel including West Head	
Biophysical Values	- Geopreservation site: Tory Channel East Head. - Arapawa Island Reserves – nationally significant original cliff vegetation and rare species. Possum free. - The eastern flanks of Arapawa Island support some of the best remaining examples of Cook Strait mixed broadleaf forests and are nationally significant. - Highly natural coastal cliffs and large southerly swells are typical of this high-energy coastline, which is minimally modified. - Steep coastal cliffs and rocky reefs dominated by high-energy wave action provide a unique coastal habitat. - Easternmost parts of Arapawa Island hold outstanding natural character due to the unmodified cliffs. Remaining northern parts of Arapawa Island and Kaitapeha hold high levels of natural character.
Perceptual Values	- Gateway to South Island and Marlborough Sounds from Cook Strait ferry route. - Dramatic, narrow entrance to the Tory Channel between East Head and West Head. - Dramatic coastal processes are highly legible along the length of the Arapawa Island's steep coastal cliffs and rocky reefs. - Semi-exposed to very exposed coast. - Strong tidal currents on the outer edge of the Sounds. - Experiential and naturalness values high along Kaitapeha Peninsula and northern Arapawa Island, including East Bay and parts of Tory Channel.
Associative Values	- Early whaling stations including first shore whaling station at Te Awaiti and Fisherman's Bay. - Pa sites and other archaeological evidence of early Māori settlement line the coast of Tory Channel.
Overview	Based on the above values, Arapawa Island and East and West Heads have been identified as ONF's due to the exceptional biophysical and associative landscape values and very high sensory landscape values. Dramatic coastal processes are highly legible along the length of Arapawa Island's steep coastal cliffs and rocky reefs. The outer coast of Arapawa Island features nationally significant original cliff vegetation whilst the south-facing slopes of the island feature nationally significant regenerating coastal forest. Tory Channel features as the marine gateway to the South Island and Marlborough Sounds via the dramatic, narrow entrance to Queen Charlotte Sound between East Head (a geopreservation site) and West Head. Kaitapeha Peninsula, at the entrance to Tory Channel, is a legible forested landmark. The waters around East Bay have nationally significant ecological values, particularly for Hector's dolphin. There is considerable evidence of early Māori settlement/activity throughout the area, with sites particularly intense around East Bay, Arapawa Island. The first whaling station in New Zealand was established in Tory Channel, at Te Awaiti in 1827 by Londoner John Guard and is reputed to be the first European settlement in the South Island. Modifications include: cleared vegetation and pasture; power lines; tracks; buildings; and moorings. Modifications also include the heritage sites at Okukari Bay. Aquaculture is present in East Bay and isolated parts of Tory Channel.

15. Exposed Eastern Coastline	
Biophysical Values	- Nationally significant seascape – steep coastal cliffs, rocky reefs, boulder beds, coves and bays. - Geopreservation site: Fighting Bay (regionally important) Torlesse Schist. - Exposed, steep, rugged sea-cliffs, rocky reefs, boulder beds and coves/bays. - Highly natural coastal cliffs and large southerly swells typify a high-energy coastline. - Highly indented coastline and intricate bluff system between Robertson Point (Port Underwood) and Tory Channel. - The lower portions of this exposed coastline retain very high levels of natural character.
Perceptual Values	- Dramatic cliffs and rocky shoreline define the eastern coastline and are extremely memorable, despite the plantation forestry on the upper ridge. - Numerous, continuous sequence of rocky bays and coves.
Associative Values	- Pa sites and other archaeological evidence of early Māori settlement line the coast of Port Underwood. - Signing of the Treaty of Waitangi on Horahora Kakahu Island in 1840. - Early whaling station at Robertson Point.
Overview	Based on the above values, the Exposed Eastern Coastline has been identified as an ONF due to its exceptional biophysical and associative landscape values and very high sensory landscape values. The south-eastern Cook Strait coastline of Port Underwood extends northwards to shortly south of West Head and features exposed, steep and rugged sea cliffs with rocky reefs, boulder beds and coves/bays. The eastern coastline of Port Underwood displays a wealth of history, ranging from old whaling stations and mission stations to cottages and cemeteries. The Treaty of Waitangi was signed on Horahora Kakahu Island, the site of the former Horikaka Pā. Modifications include: cleared vegetation; forestry; tracks; roads; buildings; high voltage cable station (Fighting Bay); and a limited number of moorings in Cutters Bay and Whangatoetoe Bay. Adjacent to marine farms in Cutters and Whangatoetoe Bay.

16. Islands of North-Eastern Queen Charlotte Sound including White Rocks and The Brothers	
Biophysical Values	- Geopreservation site: Long Island cuspate foreland. - The islands have an exposed, steep and rocky character and are remnants of mountain ridges that pre-date submergence of the former landscape. - Long Island is an island sanctuary and of international significance as a marine reserve. - Internationally and nationally significant are the Brothers islands (for tuatara) and White Rocks (for Duvaucel's gecko). - There are very low levels of modification evident on all islands. - The islands are important for their uninterrupted natural sequences, from ridgetop to sea floor. - Motuara Island is recognised as nationally significant due to its regenerating bush, many species of native bird endangered on the mainland and its predator-free status. - The waters around these islands and up the Endeavour Inlet have been identified as having nationally significant ecological values, particularly for Hector's Dolphin. - Pickersgill Island is recognised as regionally significant for its flora and fauna. - Blumine Island is recognised as nationally significant due to it being home to the world’s most endangered kiwi, the rowi as well as other endangered birds. It is also

16. Islands of North-Eastern Queen Charlotte Sound including White Rocks and The Brothers	
	predator-free. - The south Brothers Island is one of the most pristine seabird islands in New Zealand. - All islands and most interconnecting waters hold outstanding natural character.
Perceptual Values	- These rugged, exposed outer islands are highly legible and are highly natural due to their bush clad slopes and lack of modification. - Their location at the entrance to Queen Charlotte Sound makes them excellent reference points for boaties. - Strong tidal currents and considerable wave action are present. - The Brothers Islands are clearly legible as a group of islands that are amongst the most exposed islands in Marlborough.
Associative Values	- A 12 metre-high wooden lighthouse built in 1877 stands on The Brothers. - There are numerous Māori and European heritage and archaeological sites on these islands.
Overview	Based on the above values, Islands of North-Eastern Queen Charlotte Sound Including White Rocks and The Brothers have been identified as ONF's due to the exceptional biophysical and associative landscape values and very high sensory landscape values. The cluster of smaller islands at the mouth of Queen Charlotte Sound form an attractive land/water interface. These Islands include Blumine Island, Pickersgill Island, Long Island, Motuara Island, Kokomohua Islands, The Twins, Motungarara Island and White Rocks. The smaller islands are island sanctuaries and are valued internationally and nationally for their significant ecological values. The area is highly valued for its European and Māori heritage, including the World War Two infrastructure that remains evident, the early whaling history and the extensive early Māori archaeological sites and stories relating to the area. The area is also valued for the recreational use and nature tourism potential of this part of Queen Charlotte Sound. Large areas of the waters in Queen Charlotte Sound are of international and national scientific ecological significance. Blumine Island and Arapawa Island Reserves are considered nationally significant for ecological values. The highly exposed White Rocks feature unique native New Zealand and Cook Strait species of international significance. The eastern-most point of the Marlborough Sounds, The Brothers Islands, are of international and national significance due to their tuatara populations and the high wooden lighthouse built in 1877. Modifications include: lighthouse on eastern part of the Brothers Island; track (Motuara Island); and gun emplacements on Blumine Island.

17. Northern Lands of Inner Queen Charlotte Sound	
Biophysical Values	- Allports Island, Kaipakirikiri Bay and southern flanks of Onahau Bay are of localised ecological value. - Predator-free island of Allports Island. - Forested headland of Kaipupu Point managed as a “mainland island” with high natural character values. - Regionally important tracts of primary forest in Kumutoto Bay and impressive forest sequences on southern flanks of Onahau Bay. - Allports Island, Kaipakirikiri Bay and southern flanks of Onahau Bay retain very high levels of natural character and the remaining areas hold high natural character values.

17. Northern Lands of Inner Queen Charlotte Sound	
Perceptual Values	- Impressive views into Kenepuru Sound and wider Queen Charlotte Sound from Queen Charlotte Track. - Intriguing regular indentation of bays between Houhou Point and Snake Point. - Land cover remains predominantly native bush and regenerating scrub, providing an attractive contrast to and setting for the towns and baches. - High experiential values in Queen Charlotte Sound, especially in relation to Kaipupu Point and Mabel Island where they are visible from Picton.
Associative Values	- Popular area for recreational activities and habitation. The popular Queen Charlotte Track extends through this area as a well-known walking/mountain biking track. - Travellers enjoy views from the Cook Strait ferries, which pass through Queen Charlotte Sound to, and from, Picton. - Evidence of early Māori settlement and activities around the coastline. - The bush-covered islands of Allports and Mabel assist boaties as navigational landmarks.
Overview	Based on the above values, Northern Lands of Inner Queen Charlotte Sound have been identified as ONF's due to the exceptional biophysical and associative landscape values and very high sensory landscape values. Queen Charlotte Sound is the eastern-most of the main Sounds and the part that New Zealanders are generally most familiar with. For many inter-island ferry travellers, Queen Charlotte Sound may be their only experience of the Marlborough Sounds. The most commonly visited part of the Sounds, Queen Charlotte Drive, is a well-known slow and winding route between Havelock and Picton with scenic views down to the bays. The intriguing regular indentation of bays is highly memorable, providing an attractive contrast to and setting for the towns and baches of Queen Charlotte Sound. Large proportions of the bays, headlands and ridges on the northern side of Queen Charlotte Sound are in DOC ownership. Within these areas, the impressive forested peak of Mt. Bolton, the lower southern slopes of Mt Stokes, and the bays and headlands of the mainland between Onahau Bay and the Bay of Many Coves, are of ecological value. Of particular value is the predator-free island of Allports Island, north-east of Picton. Large areas of the waters in Queen Charlotte Sound are of international or national scientific ecological significance. The Māori name for Queen Charlotte Sound is Totaranui, for the totara trees that grew there. Totaranui was an important trade route for early Māori, with evidence of their settlements and activities throughout the area. A large number of people also use the Queen Charlotte Track, which follows the ridge that divides Kenepuru Sound from Queen Charlotte Sound, providing panoramic viewing into both areas. Modifications include: cleared vegetation; tracks; power lines; forestry; buildings; and jetties and moorings.

18. Mt. Robertson	
Biophysical Values	- The Robertson Range extends down to the coast at Rarangi, providing shore-to-ridgetops altitudinal sequence of national significance. - Elevated parts of Mt. Robertson that are within the coastal environment hold very high levels of natural character, and lower parts hold high levels of natural character.
Perceptual Values	- Visually important backdrop to Wairau Valley. - The sheltered nature of Whites Bay is extremely memorable, retaining high levels of visual amenity.

18. Mt. Robertson	
Associative Values	- Whites Bay Cable Station. - Popular destination for camping and recreational activities (including walking the Mt. Robertson Summit Route).
Overview	Based on the above values, Mt. Robertson has been identified as an ONF due to the exceptional biophysical and associative landscape values and very high sensory landscape values. Situated at the northern-most point of the Robertson Range, Mt Robertson features a large scenic reserve, which skirts the majority of its mid to upper eastern slopes from Rarangi to the peak of Mt McCormick, which separates Queen Charlotte Sound and Port Underwood. The area features regenerating and mature beech forest. Of particular importance is the coast at Rarangi and Whites Bay where a shore-to-ridgetop altitudinal vegetation sequence is of national significance. The rocky headlands and sandy shores of Whites Bay are backed by regenerating native bush. Scenic and short DOC tracks lead to the bluffs above Whites Bay where panoramic views of Port Underwood, Cook Strait and Cape Campbell are seen. Whites Bay features a historic cable station, which connected the first telegraphic link between both the North and South Islands in 1866. Modifications include: cleared vegetation; power lines; buildings; Port Underwood Road; and tracks.

South Marlborough Outstanding Natural Features and Landscapes

19. Mt. Duncan/Mt. Rutland/Mt. Cullen	
Biophysical Values	- Geopreservation site: Okiwa Bay Pelorus Schist. - The hilly ranges are largely covered in indigenous beech and broadleaf forest. - Unencumbered by development.
Perceptual Values	- Visually important elevated backdrop of indigenous and regenerating vegetation to the Rai, lower Pelorus and Kaituna River valleys. - These, undeveloped and vegetated ridges in northern parts of the valleys provide visually attractive natural patterns, noticeably the Mt. Duncan ridge.
Associative Values	- Mount Richmond Forest Park provides a semi-remote forest experience currently characterised by unmodified landscape. - The area is managed by DOC.
Overview	Based on the above values, Mt. Duncan/Mt. Rutland/Mt. Cullen have been identified as ONFs due to their exceptional biophysical and associative landscape values and very high sensory landscape values. The indigenous forest in conservation estate, which covers the elevated ridges, assists in framing the adjacent valleys as well as providing a strong and continuous natural framework connecting a number of valleys. Modifications include: occasional walking tracks; back country huts; masts and overhead transmission line to Okiwi Bay; part of Ronga/Croisilles Road (by Ronga Saddle); a disused mine (near Mt. Cullen); and trig stations.

20. The Wairau Lagoons	
Biophysical Values	- Wairau Boulder Bank/Te Pokohiwi, lagoon and delta are geopreservation sites identified as nationally significant landforms. - Highly natural wetland, being a large coastal lagoon-estuarine system and unique estuarine ecosystem, protected as a DOC Reserve. - The lagoons are of national importance for wading birds. - Wairau Bar dry shrublands.
Perceptual Values	- Aesthetically interesting and broadly unmodified landforms of the estuarine landscape and boulder bank. - Expansive open sea views out to Cloudy Bay and White Bluffs/Te Parinui o Whiti. - Ebb and flow of weather-protected coastal waters.
Associative Values	- Māori/early polynesians archaeological sites, including middens, campsites and moa remains on the boulder bank and around the Wairau Lagoons. New Zealand's oldest archaeological site. - One of the first landing points in New Zealand by early Polynesians, some 700 years ago. - Cultural importance of the Wairau Lagoon and Wairau Boulder Bank acknowledged by the Crown in iwi Treaty of Waitangi settlement. - Wairau Lagoons Walkway. - Impressive SS Waverley shipwreck.
Overview	Based on the above values, The Wairau Lagoons has been identified as an ONF due to its exceptional biophysical and associative landscape values and very high sensory landscape values. The coastal area and river mouth, which includes the Wairau Boulder Bank/Te Pokohiwi and lagoon, contributes important biophysical values to the Wairau River valley landscape. The Wairau Boulder Bank and lagoons are nationally significant as intact geological landforms, and provide nationally significant habitats for native, vulnerable and rare waterfowl and birds. The lagoon features extensive glasswort herbfields alongside

20. The Wairau Lagoons	
	rushes, sedges, estuarine herbs and grasses. The lagoon and boulder bank afford expansive sea views out to Cloudy Bay and the backdrop of White Bluffs/Te Parinui o Whiti. The Wairau Lagoons are significant culturally to tangata whenua and are exceptional generally for the archaeological remains that have been identified there. A number of Māori/early Polynesian archaeological sites, including middens, campsites, and moa remains, are located on the boulder bank and around the Wairau Lagoons; the oldest archaeological site in New Zealand. There is evidence to suggest that the boulder bank was one of the first landing points on New Zealand by early Polynesians some 700 years ago. The Crown, through iwi settlements, has declared the Wairau Lagoons and Wairau Bar as areas of cultural importance. Modifications include: Wairau Lagoons Walkway track; small footbridges over watercourses; the southern extent of the Wairau Bar Road; a house close to the tip of the Wairau Bar; and the shipwreck of the *SS Waverley*. This ONF excludes the oxidation ponds, the small collection of buildings at the terminus of the Wairau Bar Road and modified farmland south of the road, as well as modified land south of the lagoons, close to the southern hills.

21. Te Parinui o Whiti/White Bluffs	
Biophysical Values	- High legibility of the predominantly grass-covered hills and exposed coastal bluffs. - Geopreservation site: White Bluffs/Te Parinui o Whiti. - Dry coastal forest and treeland vegetation within gully systems. - Significance as the largest sea-cliffs in Marlborough.
Perceptual Values	- Visually dramatic and striking geological form, resultant of various tectonic, erosional and climatic forces at work.
Associative Values	- A Ngāi Tahu conservation covenant is overlaid on White Bluffs/Te Parinui o Whiti.
Overview	Based on the above values, White Bluffs/Te Parinui o Whiti have been identified as an ONF due to its exceptional biophysical and associative landscape values and very high sensory landscape values. The visually dramatic White Bluffs/Te Parinui o Whiti are a striking feature, a landform that is regionally significant for its geomorphological values, and has the largest tract of native forest vegetation in the area. White Bluffs/Te Parinui o Whiti mark an important territorial boundary, with Ngāi Tahu claiming rights on the east coast of the South Island up to White Bluffs/Te Parinui o Whiti. A Ngāi Tahu conservation covenant is overlaid on the bluffs. There are limited or no modifications. Modified pasture land on top of the bluffs is excluded from the ONF.

22. The Limestone Coastline	
Biophysical Values	- Geomorphology of limestone coastline includes several coastal geopreservation sites: Needles Point Cretaceous-Tertiary boundary, Flaxbourne River folds and thrusts, and the Chancet Rocks. - Broad and deeply incised mudstone shore platforms and offshore reefs characterise the marine environment around Cape Campbell. - Colonies of New Zealand fur seals at Chancet Rocks and the Needles. - Coastal platforms and ecological values of importance, with Marlborough endemic flora common, rocky areas (including the Marlborough rock daisy) and gullies. - All of these features are interlinked by beaches, cliffs and back dunes and hill country, which share the same geology and erosional and tectonic forces, culminating in an extremely impressive and legible coastline that clearly expresses its formative processes.
Perceptual Values	- Unencumbered, predominantly pastoral land retains a high level of visual coherence. - Highly expressive coastline from the slender Cape Campbell to Waima/Ure River. - Complex geology creates spectacular landforms and features that are particularly scenic along the coastline.
Associative Values	- A number of Māori archaeological sites are associated with this area, including two ancient pa sites on the coast, as well as a number of ovens and middens. - Possible European associations relating to the limeworks at Chancet. - High recreational values, particularly at Marfells Beach and Ward Beach.
Overview	Based on the above values, The Limestone Coastline has been identified as an ONL due to the exceptional biophysical and associative landscape values and very high sensory landscape values. The Limestone Coastline provides the greatest visual drama in the south Marlborough landscape. The spectacular rocky outcrops of the Needles and Chancet Rocks along the Limestone Coastline south of Cape Campbell are extremely memorable and display very high levels of naturalness. The State Highway 1 coastal road from the Waima Bridge to the southern point of the District contains high scenic values. The coastline of this ONL is largely unmodified and very exposed. The area has remote values and access is limited to a few locations, including Ward Beach and a small number of points south of the Waima River. Walks along the sandy shoreline to the impressive limestone outcrops of the Needles and Chancet Rocks are backed by steep terrain where views towards the open ocean are gained. Views from Cape Campbell lighthouse are spectacular, where panoramic vistas of the sweeping curve of Clifford Bay and the southern shores of the North Island are evident. Other than farm-related activity on the land, this coastline is unmodified, with no aquaculture or jetties/ wharves. The area, once visited, is extremely memorable. Prominent reef areas in the north (including Cape Campbell), give way to extensive sand/gravel shores in the south and large offshore *Macrocystis* (kelp) beds are also present off this coastline. The coastal cliffs and escarpments have small low indigenous forest remnants and unusual, highly distinctive herbfields with nationally threatened species. The dunes and coastal flats also contain nationally threatened species. The Canterbury Gully dunefield, located just south of Cape Campbell, contains nationally threatened ecosystem types and plant species. The coastal scarps and flats have nationally significant ecosystems, including dunes and salt turfs, and good sequences of native coastal vegetation. Several areas are set aside for conservation of natural values through QEII National Trust covenants. Modifications include: pastoral land, occasional fences, farm tracks, a gravel road leading to the lighthouse, a lighthouse and collection of small buildings (including a small overhead powerline), an airstrip, a small quarry, and the Ward beach buildings and road end. This area also includes the eastern extent of Marfells Beach Road.

23. Bryant Range, Upper Pelorus River Area, Richmond Range Conservation Estate and Red Hills Ridge	
Biophysical Values	- High geological legibility. - Geopreservation sites include: Lake Chalice debris dam; Wellington Gold Mine, Top Valley; Pelorus Bridge river gorge; Onamalutu Valley metachert; Dun Mountain and Alfred Stream earthflow (regionally important geological feature). - The ecological values are of national significance. - A band of ultramafic rock extends through Red Hills area, which leads to stunted, sparsely distributed plants that are quite unique to the area. - Mount Richmond Forest Park contains relatively unmodified native vegetation including alpine herbfields, beech forest and ultramafic zone vegetation. - The small Onamalutu Scenic Reserve and its unique remnant of virgin podocarp forest provide an example of the forests that once covered the alluvial plains of the Wairau and surrounding valleys. - The Pelorus Bridge Scenic Reserve is one of the last stands of river-flat forest in Marlborough. - Mount Richmond Forest Park provides habitat for native bird species, including Blue duck, New Zealand falcon and South Island kaka. - Lake Chalice, located in the Forest Park, is unusual in that its only fish are the native koaro.
Perceptual Values	- Very high levels of natural character, due to unmodified landscape in the upper Pelorus River catchment. - Visually interesting rusty tinge in Red Hills and Dun Mountain, which is discernible from the Wairau Valley and Nelson, and is extremely memorable. - The skyline of the Richmond Range forms a key feature in the Marlborough landscape, especially as the northern backdrop of the Wairau Valley. - Mt Richmond and Johnston Peak are the highest peaks, and highly visible. Mt Fishtail is a distinctive peak. - V ery high scenic quality of Lake Chalice, one of the few natural lakes in this area.
Associative Values	- The remains of old gold mines in valleys of the Richmond Range and Wairau River north bank. Some interest by early European prospectors in minerals around Dun Mountain. - Archaeological sites in the area indicate use of the argillite resource. - A number of tramping tracks in DOC-managed Mount Richmond Forest Park, including tracks to Mt Richmond and Lake Chalice. The park provides a semi-remote, forest wilderness experience.
Overview	Based on the above values, Bryant Range, Upper Pelorus River Area and Richmond Range Conservation Estate and Red Hills Ridge have been identified collectively as an ONL due to the exceptional biophysical and associative landscape values and very high sensory landscape values. The hills, valleys, ridges and mountains of the Bryant, upper Pelorus area and Richmond Range include the highest and most recognisable peaks of north Marlborough. The ONL covers peaks, ridgetops and remote conservation land, extending from the peaks backing Pelorus Sound to the upper, narrow valley of the Wairau River at the Red Hills Ridge. Much of this large area lies within conservation estate and remains predominantly in indigenous forest. It contains high ecological and biological values and is of scientific interest due to the underlying geology of the mineral belt. Being under DOC management, this area also incorporates a high level of scenic and recreational value, providing public access to many semi-wilderness recreational opportunities, such as in and adjacent to the Pelorus River. These ranges also form a visual backdrop north-west of Blenheim and the Wairau River Plains, the steep, bush-covered upper slopes and impressive skyline appreciated from a number of well-travelled

23. Bryant Range, Upper Pelorus River Area, Richmond Range Conservation Estate and Red Hills Ridge	
	roads. Cultural heritage values relate to the Māori archaeological sites identified in the area (particularly along the Wairau side of the ONL) and the legible fabric that remains from the history of gold mining, and, to a lesser extent, timber milling and farming that occurred in the area. Modifications include: numerous backcountry tracks and huts; overhead power line over Maungatapu Saddle; and a small section of Mount Richmond Road. Onamalutu Reserve area contains a track and interpretation boards. The ONL excludes forestry areas, tracks and modified lower valley slopes.

24. The Chalk Range	
Biophysical Values	- Particularly interesting geology with limestone outcrops, including geopreservation sites in Isolated Creek and Sawcut Gorge. - Highly legible limestone features and outcrops along Waima River and Chalk Range. - Landscape clearly expresses its formative processes, via tectonic forces and fluvial and glacial activity. - Endemic Marlborough plants on limestone scarps.
Perceptual Values	- Prominent limestone ridge of the Chalk Range is visually impressive and memorable. - Towering cliffs and enormous boulders add visual drama to the landscape. - Spectacular chasm of 150 metre-deep Sawcut Gorge, in places only 2 metres wide, is visually dramatic.
Associative Values	- Sawcut Gorge area valued for its unique DOC-managed recreation opportunities.
Overview	Based on the above values, The Chalk Range has been identified as an ONF due to its exceptional biophysical and associative landscape values and very high sensory landscape values. The limestone country within the northern Kekerengu Valley is exceptional, displaying towering cliffs of considerable height, overhanging vegetation and the spectacular Sawcut Gorge. Modifications include: farm tracks, walking tracks, backcountry huts, pasture, sparsely-located farm related buildings and structures (i.e. stockyard), fencing, and a mast on Ben More.

25. The Inland Kaikoura Range	
Biophysical Values	- The high, exposed and jagged ridge of the Inland Kaikoura Range is extremely legible. - Geopreservation sites include Tapuae-o-Uenuku zirconium aegirine; Hodder River weathering features; Lake McRae fault trace and landslides (Clarence Valley); and Lake McRae debris and dam. - A diverse range of indigenous fauna, especially insects and lizards. - A number of nationally threatened plant species are present.

25. The Inland Kaikoura Range	
Perceptual Values	- The rugged form, grand scale and sheer vertical prominence make the entire range a visually spectacular and dramatic landscape. - Range forms backdrop to the eastern side of the District from within the Awatere Valley. - Visually impressive peaks of Mount Tapuae-o-Uenuku, Mount Alarm and Mitre Peak.
Associative Values	- Tapuae-o-Uenuku is the highest peak in Marlborough (and highest mountain in New Zealand outside of the Southern Alps). It is highly recognised as an icon by many trampers and climbers. - The Inland Kaikoura Range is imbued with spiritual and traditional values. Tapuae-o-Uenuku is acknowledged in Ngai Tahu Claims Settlement Act for cultural, spiritual, historical and traditional associations.
Overview	Based on the above values, The Inland Kaikoura Range has been identified as an ONF due to its exceptional biophysical and associative landscape values and very high sensory landscape values. The mountains of the Inland Kaikoura Range gain the highest elevation within Marlborough, with Tapuae-o-Uenuku at 2,885 metres a.s.l. being the highest mountain in the District. This mountainous range comprises a series of glaciated valleys, rugged mountain tops and major high country river valleys. The Inland Kaikoura Range denotes a visually impressive backdrop in views from the Awatere Valley. The Inland Kaikoura Ranges are imbued with spiritual and traditional values. Tapuae-o-Uenuku is significant to local iwi and was named as the 'watcher' by James Cook. The area is also highly regarded by mountain climbers and trampers and is one of the first places on Earth to see in the new day. Modifications include: farm tracks, walking tracks, backcountry huts, pasture, sparsely-located farm related buildings and structures (i.e. stockyard), fencing, and trig stations.

26. The Main Divide and Leatham Conservation Area	
Biophysical Values	- Geomorphological legibility of tectonic movement. - Constriction of Wairau River by Hell's Gate. - Geopreservation sites include Upper Wairau landslide, Turkeys Nest Basin solifluction slope, Waterfall Stream and Cow Stream moraines, Barber Stream rock glacier/landslide. - Highly legible and impressive straight glacial-carved U-shaped valley of main divide. - Overwhelmingly indigenous beech forest covers the sides of the upper Wairau River valley. - Wairau River and tributaries provide braided riverbed habitats, important for several native bird species.
Perceptual Values	- Visual dominance of the large braided river, primarily in the upper valley. - Surrounding steep slopes and skyline ridges are key features on the journey up the valley. - Contrast of snowy peaks and dark indigenous vegetation on the mountain sides is highly memorable. - Openness and magnificent large-scale alpine character of elevated mountain peaks leads to high degree of visual coherence. - Highly natural appearance of upper Wairau River valley with human modification limited to the transmission line and road. - Very high levels of natural character in Leatham and Branch Rivers.

26. The Main Divide and Leatham Conservation Area	
Associative Values	- Majority of landscape within conservation areas. Leatham Conservation Areas and Rainbow Valley popular for skiing, fishing, four wheel driving, mountaineering and tramping. - Remote recreational opportunities. - Passes in the upper Wairau River valley were part of overland routes used by Māori.
Overview	Based on the above values, The Main Divide and Leatham Conservation Area has been identified as an ONL due to its exceptional biophysical and associative landscape values and very high sensory landscape values. The upper Wairau River valley primarily derives its landscape value from the steep, beech-clad mountain slopes and tussock-clad tops of the main divide that enclose it. This visually distinctive valley provides access to a variety of wilderness recreation experiences. The Leathham Conservation Area in the remote ridges and valleys above the true right bank of the river is popular with experienced hunters and trampers who take advantage of DOC routes such as the Leatham to Molesworth Route. The Leatham and Branch Rivers have very high natural character and the Leatham Conservation Area is also popular for fishing and four wheel driving. The Main Divide area of this ONFL features the headwaters of the Rainbow and Wairau Rivers and includes the Turk, Stafford and Mangerton Ridges and the Raglan Range. The area is largely experienced from the Wairau-Hanmer Springs Hydro Road, which extends from Hanmer Springs into the upper Wairau River valley. The Wairau River valley was also used by Māori to access overland routes through the mountains, including the saddles of the Branch, Leatham and Waihopai to the upper Awatere and Acheron/Saxton catchments of the Clarence River. Modifications within Leatham Conservation Area include: tracks, backcountry huts, occasional small quarries, some exotic vegetation, and trig stations. Modifications within the Main Divide include: Wairau–Hanmer Springs Hydro Road, HDVC transmission line (and exclusion zone), Rainbow ski field road, backcountry tracks and huts, RNZAF training camp, buildings, stockyards, small areas of pasture, trig stations and masts, and areas of exotic vegetation around the river. The ONL excludes the Rainbow ski field.

27. Molesworth Station and Upper Clarence	
Biophysical Values	- High geomorphological legibility with geopreservation sites, including Saxton River faulted terraces, Isolated Flat, Tarndale-Sedgemere fault trace (Awatere Fault) and Tarndale flats. - Altitude ranges from 549 metres a.s.l. to over 2,100 metres a.s.l. - Molesworth area is of national ecological significance, with over 70 threatened species within the conservation area. - Molesworth supports one of New Zealand's most diverse lizard faunas. - Wetlands around Lake Sedgemere support a variety of native flora.
Perceptual Values	- Molesworth Station is one of Marlborough's and Canterbury's iconic high country landscapes. - Molesworth Station and Upper Clarence retain high legibility through its remoteness and unencumbered land use. - Molesworth Station and Upper Clarence retain high levels of naturalness. - The ONL holds memorable and visually dramatic landscape elements, such as rugged mountain tops, valleys, scree slopes, unmodified rivers, tarns and cultural features. - The entire mountainous area is subject to extreme weather conditions, with hot, dry summers and harsh winters.

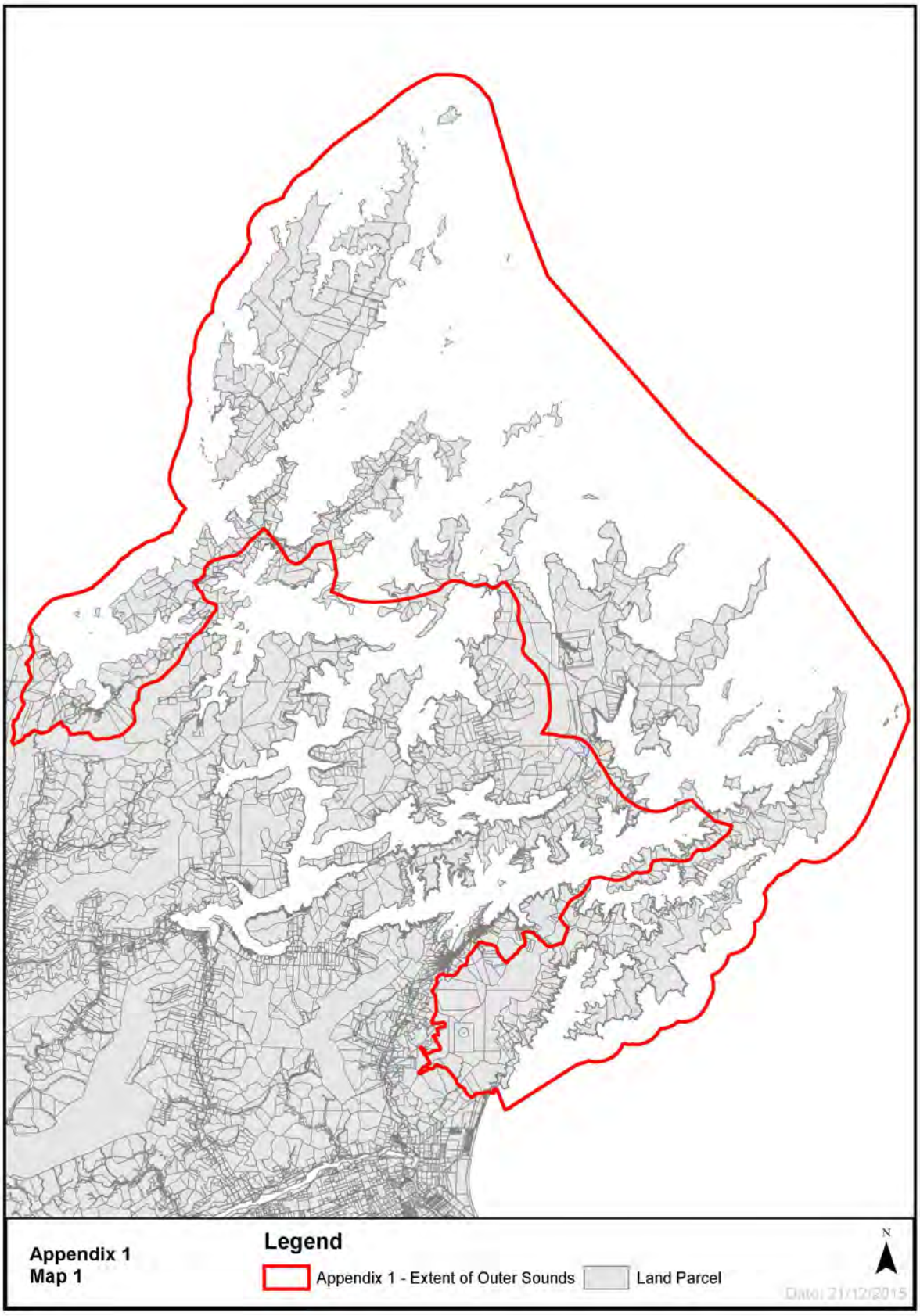
27. Molesworth Station and Upper Clarence	
Associative Values	- The Molesworth Station is a New Zealand icon and destination for heritage tours. - Remote recreational opportunities, including horse treking, cycling, rafting, fishing, hunting and camping. - The Molesworth area has both rich Māori and European heritage values. - At 180,787 hectares, Molesworth is home to New Zealand's biggest farm, supporting the country's biggest herd of beef cattle. - An early inland route via the upper Wairau was used by Māori travelling south through Molesworth. The Clarence River valley was used by Māori travelling from the river mouth to Waiau.
Overview	Based on the above values, Molesworth Station and Upper Clarence have been identified as an ONL due to its exceptional biophysical and associative landscape values and very high sensory landscape values. This area is almost entirely contained within conservation estate, containing many remote and scenic mountain ranges including the Boddington, Rachel and Inkerman Ranges and the Bullen Hills. The ONL area includes the upper reaches of many Canterbury and Marlborough rivers. There are numerous tarns and lakes. Notable rivers include the Clarence, Wairau and Awatere. Molesworth Station is a remote area surrounded by snow-capped peaks, stunning river valleys, extensive tussock lands and pasture. It is a working farm, but, nevertheless contains high levels of ecological interest. The Molesworth Station is highly significant for the presence of endemic and rare species of flora and fauna, with over 70 threatened species present. The wetlands around Lake Sedgemere are of notable value and the Molesworth area in general supports one of New Zealand's most diverse lizard faunas. The station, which occupies the southern portions of the District, is one of Marlborough and Canterbury's iconic high country landscapes. Molesworth contains memorable and dramatic landscape elements, including, rugged mountain tops, valleys, scree slopes, unmodified rivers and cultural features. The entire mountainous area is subject to extremes of weather, with hot summers and harsh winters, typical of continental climates. Although not as numerous as in other parts of the District, the heritage values within this area are highly evident, especially at Molesworth and Tarndale Stations. Access to the area is from the Wairau-Hanmer Springs Hydro Road, which extends from Hanmer Springs into the upper Wairau and the Awatere valleys. The Molesworth area was a link within the network of Ngai Tahu trails developed throughout the South Island for mahinga kai purposes. The journeys, sites and stories relating to the trails are recorded in Ngai Tahu traditions and are of high significance. Modifications include: farm tracks; walking tracks and backcountry huts; Awatere Valley Road and Wairau–Hanmer Springs Road; buildings; stockyards; HDVC transmission line (and exclusion zone); occasional small quarries; some exotic vegetation around rivers; pasture; trig stations and masts.

Areas with high amenity landscape values

A. Marlborough Sounds Coastal Landscape	
Values	- Distinctive, fractured pattern of the Marlborough Sounds coastline. - Slender peninsulas and range of islands provide distinctive landscape containing very high aesthetic values. - Combination of rocky coastlines, vegetated and grassy ridges and small coves, bays and inlets portrays an overwhelming sense of naturalness. - The area is imbued with cultural and historic values. It is extremely memorable.

A. Marlborough Sounds Coastal Landscape	
	- Outer Sounds are more rugged and exposed to the varying climatic conditions in the Cook Strait. - Inner Sounds more sheltered and visually defined by forest-clad ridges and mountain tops which promote the intimacy experienced from within the waters. - Many of the smaller bays in Inner Sounds show little evidence of human intervention, and the level of visual intactness remains high. - Small settlements, generally nestled closely at the head of a bay, retain a high level of aesthetic coherence, contained by the steep, often vegetated sides of the enclosing ridge. - High levels of naturalness, recreational values and visual coherence.
Overview	The network of headlands, bays, inlets and islands of this distinctive coastline contain very high aesthetic and associative values. The rich cultural history of the Marlborough Sounds, including its high levels of naturalness and recreational values combine to create a highly memorable coastal landscape. Within this Coastal landscape there are ONLs and ONFs.

B. Wairau Dry Hills Landscape	
Values	- Soft, undulating hills act as an important backdrop to Blenheim and contrast with the varied land use practices across the Wairau Plains. - Southern Hills provide topographical relief to the flat plains. - The Hills provide a high level of visual coherence due to their prominent and mostly unencumbered nature from buildings and noticeably 'clean' ridges and spurs. - Dry hills around Dashwood Pass and Redwood Pass are particularly scenic. - Golden, homogenous undulating form is an iconic feature of Marlborough. - The openness of the hills provides recreational and transient values, offering panoramic views of the Wairau Valley. - Wither Hills Farm Park is a popular recreation area and Redwood Pass is popular for mountain biking.
Overview	The key values of this area are sensory values related to the visual coherence of the hills in terms of their homogenous undulating form and colour, and the way in which they provide a visual contrast to the rows of vines that stretch across the plains. They have become so evocative of south Marlborough. This is due in part to their presence as the visual backdrop to the population centre of Blenheim and because so many people pass through these hills on State Highway 1.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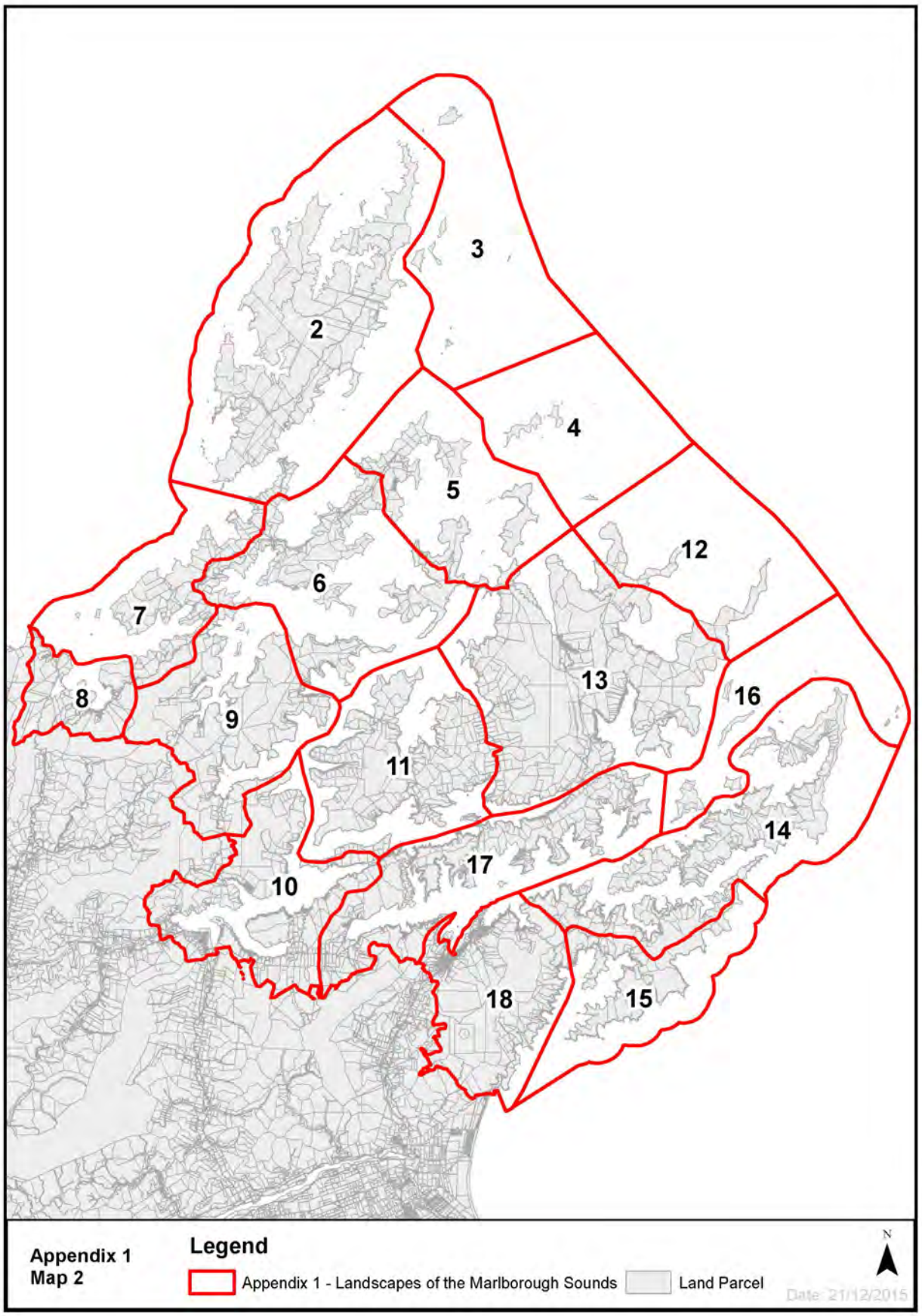
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Appendix 1 - Landscapes of the Marlborough Sounds
Land Parcel
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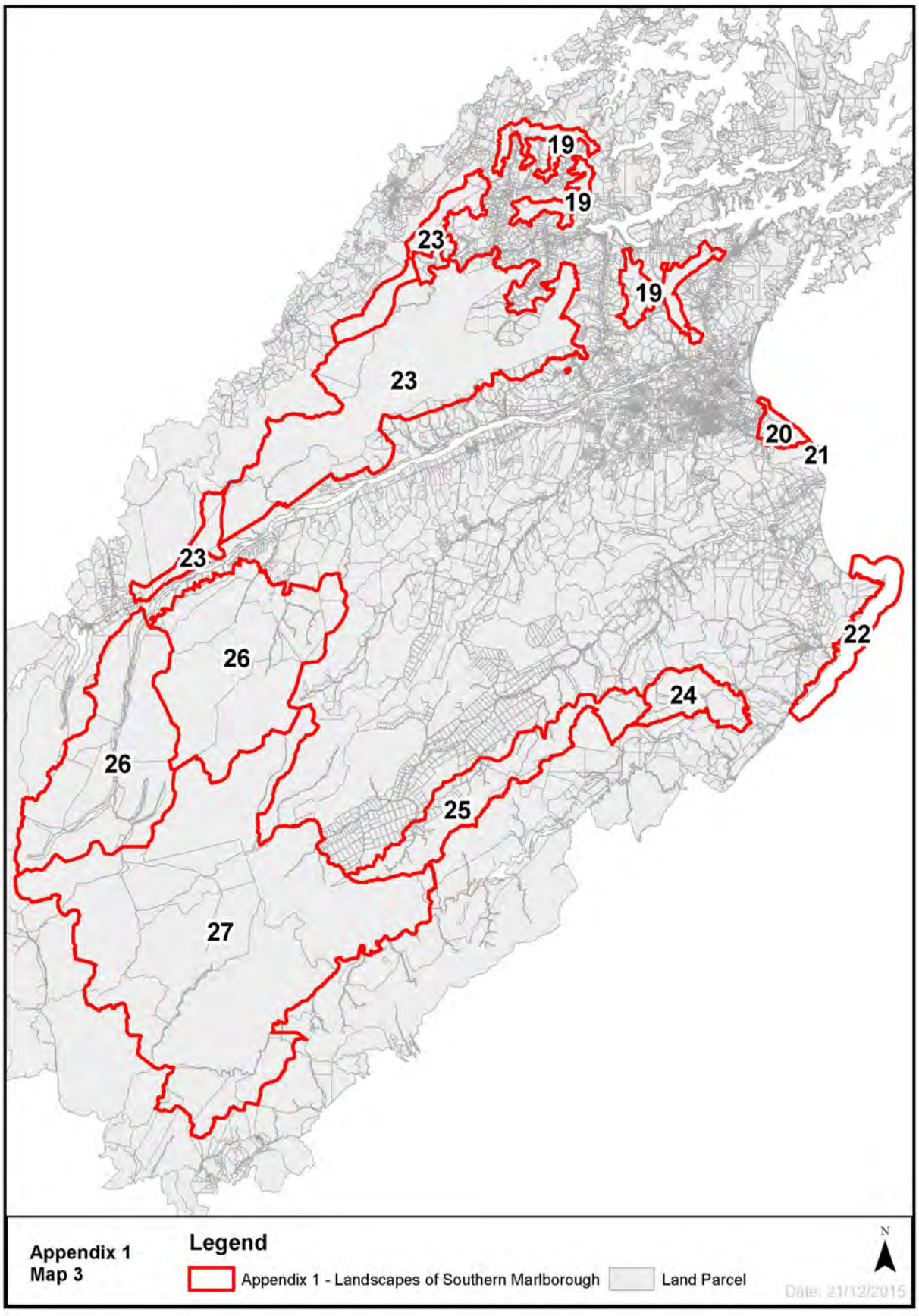
Date: 21/12/2015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Appendix 1
Map 3
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Appendix 1 - Landscapes of Southern Marlborough
Land Parcel
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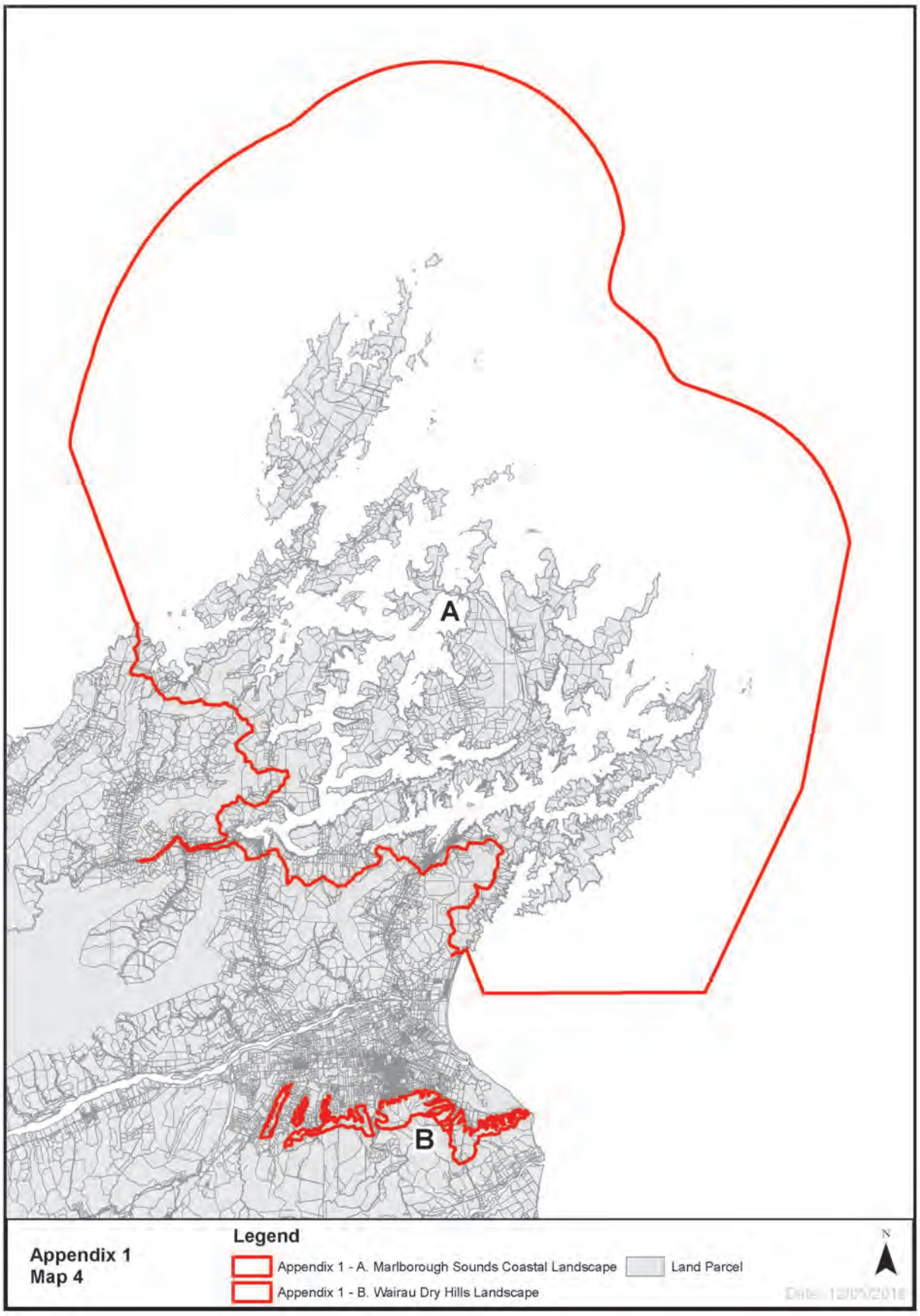
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Appendix 1
Map 4
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Appendix 1 - A. Marlborough Sounds Coastal Landscape
Appendix 1 - B. Wairau Dry Hills Landscape
Land Parcel
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Appendix 2

Values contributing to high, very high and outstanding coastal natural character

(Note that maps showing each of the coastal marine areas and terrestrial areas are included at the end of Appendix 2.)

Coastal Marine Areas

Marlborough Sounds

Coastal Marine Area A: Tasman Bay and south-western D'Urville Island			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Outer Croisilles Harbour – south western D'Urville Island	Very High	**Largely unmodified near-shore coastal marine environment ranging from semi-sheltered to very sheltered shores.** - Whangarae Estuary. - Subtidal sand flat and boulder bank habitats/ communities at the mouth of Croisilles Harbour. - High flow habitats associated with Current Basin and French Pass. - Greville Harbour and associated communities. - D'Urville Island Scenic Reserve. - Offshore islands (Croisilles Harbour and rocky outcrops (e.g. Paddock Rocks). - Adjoins Coastal Marine Area B.	Excludes Squally Cove, which has numerous marine farms. Includes a small number of marine farms in two small bays in Current Basin. Certain offshore areas in Tasman Bay are commercially trawled.

Coastal Marine Area B: D'Urville Island – Northern Cook Strait			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Western D'Urville Island – Rangitoto Islands	Very High	**Largely unmodified and highly diverse near-shore coastal marine environment ranging from very exposed to very sheltered shores.** - Diverse rocky reef communities. - High current habitats including areas dominated by bryozoan corals. - Port Hardy and associated sheltered Sounds communities. - D'Urville Island Scenic Reserve. - Several offshore islands and rock	One small marine farm in Port Hardy. Certain offshore areas in Tasman Bay and Cook Strait are commercially trawled.

Coastal Marine Area B: D'Urville Island – Northern Cook Strait			
Sub Area	**Rating**	**Key Values**	**Additional comments**
		stacks including Stephen's Island, the Rangitoto Islands and Jag Rocks. - Adjoins Coastal Marine Area A.	
Eastern D'Urville Island – Waitui Bay	High	**Near-shore areas, including around the Trio Islands, Chetwode Islands and Titi Island, retain high natural values.** - Variable exposure. - Numerous ecologically significant marine sites. - D'Urville Island Scenic Reserve; Chetwode Island Nature Reserve; Titi Island Nature Reserve.	Offshore banks between the island groups are commercially trawled, in places relatively intensively. Some commercial scallop dredging in Waitui Bay and northwest of Nukuwaiata Island.
Cape Lambert – Cape Jackson	Very High	**Largely unmodified section of coast with exposed rocky bluffs, headlands and reefs.** - Cape Lambert Scenic Reserve. - Adjoins Coastal Marine Area G at Cape Jackson.	Some commercial trawling offshore. Offshore areas in Waitui Bay are commercially dredged for scallops.
Inner Port Gore	High	**Relatively sheltered and largely unmodified intertidal and near-shore marine environment.** - Cape Lambert Scenic Reserve. - Eastern and southern shores backed by regenerating scrub/forest. - Some ecologically significant marine sites.	

Coastal Marine Area C: Pelorus Sound			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Pelorus Heads	High	**Largely unmodified section of coast extending into the entrance of Pelorus Sound to Kaitira and Te Akaroa.** - High current communities flanking the main channels. - Includes the offshore main channel entering Pelorus Sound. - Duffers Reef including its associated king shag nesting sites. - Adjoins Coastal Marine Area B.	Some marine farming north of Te Akaroa.

Coastal Marine Area C: Pelorus Sound			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Maud Island to Yellow Cliffs, including Apuau Channel	High	**Near-shore areas retain high natural values.** - Sheltered indented coastline with multiple aspects. - Tom Shand Scientific Reserve (Maud Island) and Deep Bay Scenic Reserve on the opposite mainland, separated by Apuau Channel.	Commercial scallop dredging in Tawhitinui Reach and Waitata Reach.
Fitzroy Bay and western Hallam Cove	High	**Near-shore and offshore waters mostly unmodified.** - Backed by Garne and Savill Bay Scenic Reserve. - Elephant fish spawning grounds close to shore.	Two mussel-spat marine farms.
Tennyson Inlet	Very High	**The largest marine area in Marlborough surrounded by protected native forest.** - Largely unmodified, very sheltered inner-Sounds marine environment. - Low natural diversity. - Convoluted shoreline with three small offshore islands. - Three small estuaries. - Several scenic reserves.	Moorings and a small port area are located in Elaine Bay. A number of moorings are also present in Penzance Bay.
Nydia Bay – Tawero Point	Very High	**Largely unmodified section of coast extending over many kilometres from the head of Nydia Bay along the western side of Pelorus Sound to Tawero Point.** - Several small bays. - Mostly sheltered but exposed to a wide range of tidal flow conditions including high flow communities. - Large sections of this coast are backed by scenic reserves.	Two small areas of mussel farms (Fairy Bay and west of Tawero Point).
Pelorus/Kaituna Estuary – Mahakipawa Arm – Kaiuma Bay	High	**The largest estuarine area in the Marlborough Sounds. Natural processes within the estuary are largely intact.** - Extensive saltmarsh beds, intertidal mud flats and other estuarine communities. - Diverse avifauna. - Despite modifications around parts of its perimeter, this large estuarine complex retains many of its natural qualities.	Excludes Port Havelock. Water quality modified by discharges, port activities and river inputs. Partly modified margins due to the port, an oyster farm, roading and agriculture.

Coastal Marine Area D: Queen Charlotte Sound			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Outer Queen Charlotte Sound	Very High	**Largely unmodified and mostly sheltered near-shore and offshore marine environment with complex topography, multiple aspects and complex hydrology, leading to a wide variety of environmental conditions. Naturally low sedimentation levels.** - Long Island – Kokomohua Marine Reserve. - Blumine and Pickersgill Islands. Fast flow habitats through Patten and Pickersgill passages. - Several ecologically significant marine sites, including the entire northern flank of East Bay. - A large proportion of the terrestrial environment is protected land (several scenic reserves). - Adjoins Coastal Marine Area G.	Excludes an area around Motuara Island and offshore from Ship's Cove, which is commercially dredged for scallops. Excludes Otanerau Bay and the eastern sector of East Bay, which have a relatively high concentration of marine farms.
Inner Queen Charlotte Sound	Very High	**Largely unmodified near-shore and offshore marine environment.** **Very sheltered with a highly indented coastline made up of numerous inlets and bays.** **Relatively low sedimentation levels due to the absence of any major rivers.** - Grove Arm supports the largest estuarine wetland in Queen Charlotte Sound. - A large proportion of the surrounding terrestrial environment, mainly along the northern shores and in Grove Arm, is protected land. - Several scenic reserves. - Several ecologically significant marine sites.	Privately owned jetties and moorings are common through various parts of this region, but these are considered to have only small localised effects ecologically.
Tory Channel entrance to Umuwheke Bay	High	**Largely unmodified intertidal and near-shore marine environment.** - Moderate-strong current communities near the entrance to Tory Channel grading to more typical inner Queen Charlotte Sound communities with distance away from Tory Channel. - Backed by regenerating scrub/forest and scenic in places.	Commercial scallop dredging occurs in places offshore.

Coastal Marine Area D: Queen Charlotte Sound			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Ship Cove – Motuara Island	High	**Largely unmodified intertidal and near-shore marine environment backed by significant naturally forested hill slopes.** - Motuara Island. - Bordered by Long Island – Kokomohua Marine Reserve. - Small areas of *Macrocystis* kelp near Motuara Island. - Adjoins Coastal Marine Area G.	Offshore areas are modified by commercial scallop dredging between Long Island – Kokomohua Marine Reserve and the mainland at Ship Cove.

Coastal Marine Area E: Tory Channel			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Eastern entrance to Tory Channel	Very High	**Largely unmodified high current communities where Tory Channel meets the outer Cook Strait coast.** - Mostly protected from wave action except near the heads. - Adjoins Coastal Marine Area G.	Extension of the Outer Queen Charlotte Sound – Eastern Cook Strait – Rarangi sub area (Coastal Marine Area G).
Tory Channel (excluding centrally located marine farming areas)	High	**Narrow deep channel dominated by strong tidal flows, sheltered wave climate and proximity to Cook Strait.** - Shallow side bays. - Numerous ecologically significant marine sites distinguished by high current communities. - Unique natural character area as a whole. - Adjoins Coastal Marine Area G.	The main marine farming areas in Tory Channel are excluded. Ferry wash continues to have an effect but is limited to exposed intertidal shores. *Undaria* is widespread in shallow waters but is not considered to affect wider trophic/community structure and function significantly. Strong currents minimise sedimentation impacts along the main channel.

Coastal Marine Area F: Port Underwood
There are no specific areas within Coastal Marine Area F with Outstanding, High or Very High Coastal Natural Character values.

Coastal Marine Area G: Eastern Cook Strait and Outer Queen Charlotte Sound			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Outer Queen Charlotte Sound – eastern Cook Strait – Rarangi	Very High	**Largely unmodified coastal marine environment extending over many tens of kilometres.** - Semi-exposed to very exposed and subjected in places to strong tidal currents. - Diverse and productive reef communities with high macroalgae diversity. - Large whale (notably humpback whale) migration route. - Several ecologically significant marine sites. - Long Island – Kokomohua Marine Reserve. - Scenic reserves in the outer Queen Charlotte and along the outer coast of Arapawa Island. - Includes the Brothers Islands and the rugged outer coast bordering Cook Strait. - Adjoins Coastal Marine Areas B, D, E, F and H.	Excludes an area around Motuara Island and offshore from Ship's Cove, which is commercially dredged for scallops. Certain offshore areas in Cook Strait are commercially trawled.
Ship Cove – Motuara Island	High	**Largely unmodified intertidal and near-shore marine environment backed by significant naturally forested hill slopes**. - Motuara Island. - Bordered by Long Island – Kokomohua Marine Reserve. - Small areas of *Macrocystis* kelp near Motuara Island. - A significant horse mussel bed and reef community at the northern end of Motuara Island. - Adjoins Coastal Marine Area D.	Offshore areas are modified by commercial scallop dredging between Long Island – Kokomohua Marine Reserve and the mainland at Ship Cove.

South Marlborough

Coastal Marine Area H: Cloudy and Clifford Bays			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Cloudy and Clifford Bays (excluding Wairau Lagoons and Lake Grassmere)	Very High	**Largely unmodified and mostly exposed east coast South Island coastal environment extending over tens of kilometres from Rarangi to Cape Campbell.** - Extensive sand/gravel shores. - Cape Campbell reef systems and patchy offshore Macrocystis beds. - Adjoins Coastal Marine Areas G and I. - High remote values.	Certain offshore areas are commercially trawled; those grounds closer to shore are expected to be reasonably resilient to the effects of trawling. Effects of the Blenheim sewage discharge on the outer coast are considered minor. A large marine farm approved south of the Awatere River mouth, which will alter seabed values at the site once it becomes operational, is excluded.
Wairau Lagoons	High	**Large tidal lagoons and extensive salt marsh beds.** - Diverse avifauna. - An ecologically significant marine site. - Despite modifications, this large estuarine complex retains many of its natural qualities. - High remote values.	The estuary has been modified through historical stop-banking and alterations to river flows. The Blenheim sewage outfall discharges into the mouth of the Wairau River on the outgoing tide.

Coastal Marine Area I: Cape Campbell to Willawa Point			
Sub Area	**Rating**	**Key Values**	**Additional comments**
Cape Campbell to Willawa Point	Very High	**Largely unmodified and very exposed east coast South Island coastal environment extending south from Cape Campbell.** - Prominent reef areas in the north (including Cape Campbell) giving way to extensive sand/gravel shores in the south. - Large offshore *Macrocystis* beds. - Adjoins Coastal Marine Area H at Cape Campbell. - High remote values.	Certain offshore areas are commercially trawled; inshore areas are expected to be reasonably resilient to the effects of trawling.

Terrestrial Areas

Marlborough Sounds

Coastal Terrestrial Area 1: D'Urville			
General values and characteristics applicable to the whole of Coastal Terrestrial Area 1			
This area is characterised by a unique combination of ultramafic dominated basement rock types. The sheltered coastal lagoons are regionally rare. Upland vegetation is largely intact.			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
D'Urville Island	Very High with small parts High	Nationally important geological and landform features including Greville Harbour boulder spit; and serpentinitic breccias along parts of western coast. It contains regionally important landforms including: the Greville Harbour barrier dune system, and associated lagoon and swamp; French Pass partly submerged ridgeline and reef; and the D'Urville Island limestone outcrops. Island communities here are nationally important with distinctive biota, communities and habitats. Some communities, especially tussocklands, rocklands, shrublands and stunted forests are endemic to the ultramafic "mineral belt" and nationally important, with the coastal ultramafic communities, being unique in New Zealand. Also present are dune, spit, beach, lagoon, freshwater wetland, estuarine and alluvial communities, which are all very distinctive and rare in the Sounds. Overall, natural biodiversity of communities and species is exceptional. D'Urville Island is a refuge for nationally threatened fauna and flora. It is one of the largest areas that is free of possums and feral goats in New Zealand. D'Urville Island and its smaller islands hold extremely high experiential values, partially due to its semi-remoteness and dark, night-time skies, but equally due to its perceived lack of modification.	Areas of pasture and commercial forestry included within 'High' rating.

Coastal Terrestrial Area 1: D'Urville			
General values and characteristics applicable to the whole of Coastal Terrestrial Area 1			
This area is characterised by a unique combination of ultramafic dominated basement rock types. The sheltered coastal lagoons are regionally rare. Upland vegetation is largely intact.			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Croisilles Harbour Area	Very High with small parts High	Nationally important geological and landform features including Matarau Point beach ridge gravel foreland. Regionally important landforms including: Pakiaka Point barrier island and lagoon; Taipare and Whangarae limestone outcrops. Island communities here are nationally important with distinctive biota, communities and habitats. Some mainland communities, especially tussocklands, rocklands, shrublands and stunted forests are endemic to the ultramafic "mineral belt" and nationally important, with the coastal ultramafic communities, being unique in New Zealand. Also present are dune, spit, beach, lagoon, freshwater wetland, estuarine and alluvial communities, which are all very distinctive and rare in the Sounds. Overall, natural biodiversity of communities and species is exceptional. High experiential values due to lack of modification.	

Coastal Terrestrial Area 2: Cook Strait			
General values and characteristics applicable to the whole of Coastal Terrestrial Area 2			
Island communities are nationally important, with distinct and rare biotic assemblages, which are vulnerable to disturbance and loss and difficult to recover. These are vital habitats for threatened species due to their lack of introduced predators. Shrublands, herbfields and tussockland communities are nationally important habitats as they are highly distinctive and endemic to Cook Strait. The Area also supports a nationally high concentration of rare, relictual and endemic fauna, which is vulnerable to predation and/or collection. The islands and outer peninsulas hold very high experiential values due to the remote, rugged and expansive seascape vistas. The weathered sea-cliffs and hardy vegetation tilted from the wind are characteristic of their exposed maritime position. Remoteness values amplified through natural darkness of the night sky.			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Cape Lambert and Cape Jackson	Very High	Exceptional biodiversity at Cape Lambert. Threatened plants, remnant forest and regenerating native vegetation at Cape Jackson.	
Western Cook Strait, Port Underwood to Tory Channel	Very High	Intricate bluff system between Robertson Point (Port Underwood) and Tory Channel. Regionally important geological features including the Fighting Bay schist sea cliffs.	Much of the upper slopes beyond the bluffs are commercial forestry.
Western Cook Strait, Arapawa Island	Very High and High	Towering cliffs and native vegetation sequences of the Cook Strait narrows. Exceptional natural biodiversity. The eastern flanks of Arapawa Island support some of the best remaining examples of Cook Strait mixed broad-leaved forests and are nationally important, especially as possum-free environments.	

Coastal Terrestrial Area 3: Bulwer			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Land to west of Waitata Reach	Very High and High	Whilst some land has been cleared for pasture, there are limited structures on the land, especially around northern Port Ligar and land west of Waitata Reach. Of the remaining indigenous forests within the Area, much appears on more elevated slopes (Mt. Shewell, Mt. Drew, Bobs Peak, Okuri Peak), but with substantial tracts at lower coastal altitudes, especially east and south aspects (Apuau Channel,	Many bays contain houses, jetties and wharves.

Coastal Terrestrial Area 3: Bulwer			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
		Fitzroy Bay). Very High perceived naturalness values.	
Maud Island	Very High	Maud Island is distinctive, rare and nationally important due to its predator-free status and nationally threatened fauna.	
Eastern Waitata Reach, Forsyth Island and land south of Allen Strait	High (small part Very High at Kauauroa Bay)	Relatively low levels of modification and extensive areas of regenerating bush, especially on Forsyth Island. Largely-intact podocarp-broadleaved forest at Kauauroa Bay.	Also contains low intensity grazed pastoral land.
North West Bay	Very High and High	Indigenous forested peninsula at Stafford Point.	Modification to the immediate north.

Coastal Terrestrial Area 4: Arapawa			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Blumine, Pickersgill and Long Islands	Very High	The Long Island gravel cuspate foreland is considered a regionally important landform feature. Island refuges support communities with an absence of major introduced mammals, and are regionally and nationally important. These islands are also important for their uninterrupted natural sequences from ridge top to sea floor, and relatively intact coastal communities. Very high perceived naturalness values.	
Remaining areas of Arapawa	High	Extensive areas of regenerating bush. Extensive area of indigenous forest at Wharehunga Bay. Experiential values are high along parts of Queen Charlotte Sound, the Kaitapeha peninsula, parts of northern Arapawa Island, including East Bay and western parts of Tory Channel due to the numerous indented bays holding limited modification.	Occasional house and pastoral land included within rating.

Coastal Terrestrial Area 5: Portage			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Mt. Cawte and Southern Queen Charlotte Sound	Very High and High	Tracts of primary coastal forest (e.g., Kumutoto Bay) found in this area are regionally important. Most of the remainder of the land is clad in regenerating native forests. South-facing biotic communities are generally more intact (greater cover, less vulnerable to past and ongoing disturbance) than north-facing communities. Areas of high experiential values along both Queen Charlotte Sound and Kenepuru Sound.	Areas of residential land adjacent to shoreline excluded from rating.
Northern Queen Charlotte Sound and Motuara Island	Very High	There is good primary forest at the eastern end of the Coastal Terrestrial Area. Remaining areas of coastal forest are well-represented on headlands in Queen Charlotte Sound. Motuara Island is nationally important as an island refuge for “marooning” nationally threatened species. Primary podocarp-broadleaf forest between Ship Cove and Resolution Bay is distinctive and regionally outstanding, displaying intact natural sequences from ridge top to sea floor. Very high experiential values around Resolution Bay.	Refer to Coastal Terrestrial Area 8: Stokes for more on northern Queen Charlotte Sound.

Coastal Terrestrial Area 6: Nydia			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Tennyson Inlet and Nydia Bay area	Very High	Original forests on lower altitude hillslopes and toeslopes, and coastal forests are largely intact in Tennyson Inlet, and Nydia Bay to Fairy Bay. Small areas of alluvial forests and beach communities are still intact in Tennyson Inlet and Nydia Bay and contribute significantly to the biodiversity of the area. Tennyson Inlet and Nydia Bay supports some of the largest tracts of lowland and coastal forests in Marlborough. These are largely intact altitudinal sequences of primary forest, extending from ridgetops to seafloor and are therefore nationally important.	Some modification around Tuna Bay, Penzance Bay and North West Bay restricts those areas to High Natural Character.

Coastal Terrestrial Area 6: Nydia			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
		There are nationally threatened plants on the Tennyson Inlet islands. Tennyson Inlet and parts of Nydia Bay retain extremely high experiential values, due mainly to its unmodified indigenous vegetation cover that extends from the shore line to the ridges and peaks that contain the inlet.	
Southern and eastern parts	Very High and High	Extensive upland forest, although some regenerating to slopes around Hikapu Reach. High experiential values.	

Coastal Terrestrial Area 7: Robertson			
General values and characteristics applicable to the whole of Coastal Terrestrial Area 7			
Upland forest tracts are intact (some exceptionally so) and are vital habitats for nationally threatened species. Tracts of primary lowland hillslope forests are still quite extensive and regionally important.			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Port Underwood area	High	Numerous indented bays in Port Underwood from Whites Bay to Willawa Point/Oyster Bay hold high experiential values.	Most modification occurs closest to the shoreline.
Queen Charlotte Sound areas	High	Forested headland of Kaipupu Point, now managed as a “mainland island”.	
Upper parts of Mt Robertson and Kahikatea	Very High	Upland indigenous forest tracts provide vital habitat for nationally threatened species. Very high perceived naturalness.	Some exotic forestry occupies the lowlands.

Coastal Terrestrial Area 8: Stokes			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Mt. Stokes massif	Very High (and High around inner Port Gore and Camp Bay	Original forest covers most of the upper slopes of the Stokes massif and its summit supports the only occurrence of subalpine vegetation in the Sounds. It is the largest and highest forest tract in the Marlborough Sounds, and includes largely-intact shore-to-tops sequences. The area also straddles the inner and outer Sounds, where extreme weather can also play an important aspect in the Area's experiential values. Unique sub-alpine rockland vegetation [i.e. *Celmisia macmahonii* var. *macmahonii* only occurs here, on bluffs]. More settled areas of inner Port Gore retain High levels of natural character due to regenerating bush and limited modification. Limited modification and indigenous forest cover along the Queen Charlotte shores of Endeavour Inlet and Ship Cove.	Parts of Titirangi Road and Anakoha Road connecting Port Gore and Guards Bay/Anakoha Bay are included within the rating due to their limited visual and physical presence.
Southern extents	Very High	Original forest covers most of the upper slopes around Bob's Knob and the lowlands around Golf Reef Bay in Kenepuru Sound.	

Coastal Terrestrial Area 9: Pelorus			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Pelorus/Kaituna Estuary	Very High	Distinctive remnant alluvial communities, although now reduced to scattered treelands, are regionally important and include fertile podocarp and mixed broadleaf treeland, and semi-deciduous kowhai-ribbonwood-lacebark treelands. Estuarine and adjoining freshwater wetland communities are extensive, very distinctive, regionally outstanding, and provide important habitats. The estuarine system also has biotic patterns and sequences, dynamics and processes that are largely intact. The intertidal river delta, with its network of small waterways holds very high perceived naturalness values.	Refer also to Coastal Marine Area C.

Coastal Terrestrial Area 9: Pelorus			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Upper vegetated slopes	High	The forested upper slopes of Mt. Rutland assist in framing this intimate part of the Sounds. Biotic patterns and sequences, dynamics and process functioning are largely intact at higher altitudes on the hillslopes.	Lower slopes retain commercial forestry. Area delineated by vegetation cover.

Coastal Terrestrial Area 10: Kaituna			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Cullen Point	High	Cullen Point is a noted vegetated headland where views are obtained towards Havelock. High levels of perceived naturalness from the walking track on Cullen Point.	
South of Grove Arm	High	Biotic patterns and sequences south of Grove Arm. High levels of perceived naturalness from Queen Charlotte Drive.	Many houses reduce naturalness close to the shore.
Elevated parts of Mt Duncan	Very High	Upland indigenous forest tracts provide vital habitat for nationally threatened species. Very high perceived naturalness.	Pasture, forestry and scrub dominate lower slopes.

South Marlborough

Coastal Terrestrial Area 11: Wairau			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Wairau Lagoons and boulder bank	High	The river mouth lagoon–estuary, bird's foot delta, and fringing wetlands and islands are some of the country's best examples and provide extensive wildlife habitat. The whole wetland ecosystem is of national importance for wading birds (including migratory species), waterfowl and other wetland birds and is equally outstanding for freshwater and estuarine fauna. Boulder Bank/Wairau Bar is a nationally important landform. Open and expansive nature of the lagoons retains high levels of perceived naturalness.	The estuary has been modified through historical stop-banking and alterations to river flows. The Blenheim sewage outfall discharges into the mouth of the Wairau River on the outgoing tide.
Rarangi-Wairau Bar beach ridge system	High	Nationally important landform: a sequence of beach ridges and swales created by tectonic uplift events. Remnant native vegetation: forest, treeland, dry shrubland and wetland.	Areas of housing and land use modifications have eroded the legibility of some of these ridge systems.

Coastal Terrestrial Area 12: Vernon			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
White Bluffs	High	The dissected hill country terminates in the regionally significant White Bluff sea cliff overlooking Cloudy Bay. With the constant erosion on these cliffs, vegetation is scarce, but it proliferates within the slot gorges where reclusive forests of ngaio, mahoe, mapou, akiraho, akeake, kohuhu, five-finger and lancewood are found. The White Bluffs form a visually strategic and striking point along the Marlborough coast, acting as the headland that divides Cloudy Bay to the north from Clifford Bay to the south. Based on this they are extremely memorable.	Area delimited by cliff faces only.

Coastal Terrestrial Area 13: Awatere			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Awatere River Mouth	High	Incised gullies to river mouth containing ngaio, mahoe and harakeke forest. Lower part of river important habitat for freshwater fish (bullies, galaxids, eels and torrentfish.	Contained by river cliffs.

Coastal Terrestrial Area 14: Blind			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Blind (Otuwhero) River Mouth and coastal cliffs	High	The most significant valley floor meandering floodplain-low terrace sequence occupies the Blind (Otuwhero) River valley, terminating in a small river mouth backswamp-lagoon developed behind and inland of a coastal sand dune-active beach complex. Remnant coastal escarpment forest support nationally threatened species [coastal treebroom]. The lower Blind River and lagoon habitat support banded dotterel, black shag, scaup and other waterfowl.	

Coastal Terrestrial Area 15: Grassmere
There are no specific areas within Coastal Terrestrial Area 15 with Outstanding, High or Very High Coastal Natural Character Values.

Coastal Terrestrial Area 16: Campbell			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Coast west of Cape Campbell	Very High	The coastal cliffs and escarpments have small low indigenous forest remnants and unusual, highly distinctive herbfields with nationally threatened species. The dunes and coastal flats also contain nationally threatened species. Views from Cape Campbell lighthouse are spectacular, where panoramic vistas of the sweeping curve of Clifford Bay and the southern shores of the North Island are evident.	

Coastal Terrestrial Area 16: Campbell			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Canterbury Gully mouth	Very High	Canterbury Gully dunefield contains nationally threatened ecosystem types and plant species.	
Southern Coast	High	Modification is limited to light grazing and the occasional track, fence and small building. The coastal scarps and flats have nationally significant ecosystems, including dunes and salt turfs, and good sequences of native coastal vegetation. Several areas are set aside for conservation of natural values.	

Coastal Terrestrial Area 17: Wharanui			
Sub Area	**Rating**	**Key Values**	**Additional Comments**
Chancet Rocks to Waima/ Ure River Mouth	High	The coastal zone contains localised endemic plants, nationally threatened plants and naturally rare ecosystems (calcareous bluffs, stacks and screes; dunes, gravel beaches, small wetlands and marine mammal haulouts). There are two NZ fur seal colonies (Chancet Rocks and Needles Point). There is also a ventifact field. The coastline from the Chancet Rocks to the Waima River holds high experiential values. The dramatic coast-sculpted limestone features of Weld Cone, the numerous coastal stacks as well as the wave cut platforms and reefs of Chancet Rock and the Needles are prominent features displaying limited modification, despite the agricultural land use.	Light grazing dominates the land use.

Outstanding Natural Character Areas

1. D'Urville Island	
Abiotic Values	- Nationally important geological features including Greville Harbour boulder spit and serpentinitic breccias along parts of western coast. - The island has a unique mineral belt geology including many heavily mineralised ultramafic areas. - Complex and varied marine environment with a range of aspects and exposures.
Biotic Values	- Indigenous vegetation on the upland parts of D'Urville Island is largely intact and includes possum-free tracts of kohekohe, titoki and southern rata. Island communities here are nationally important. - Nationally important, unique ultramafic vegetation is extensive and includes species that are endemic to the island due to their adaptation to the high levels of trace elements found in the soil. - Other communities include dune, spit, beach, lagoon, freshwater wetland, estuarine and alluvial communities, which are all very distinctive and rare in the Sounds. - Waters of inner Greville Harbour and southern Port Hardy are flanked by extensive tracts of indigenous forest. - D'Urville Island contains one of the more extensive tracts of lowland forest remaining in Marlborough. - Largely unmodified and highly diverse near-shore coastal marine environment ranging from exposed to very sheltered shores. - Abundant populations of native freshwater fish. - Healthy stands of sea sedge at the head of Greville Harbour.
Experiential Values	- Minimal land and marine development with a highly natural coastline. - D'Urville Island holds extremely high experiential values, partially due to its semi-remoteness, but equally due to its perceived lack of modification.
2. French Pass	
Abiotic Values	- Very strong currents occur in the vicinity of French Pass. - Dangerous eddies and undercurrents. - Strong tidal mixing. - Submerged ridge at French Pass.
Biotic Values	- Largely unmodified near-shore coastal marine environment; very sheltered shores. - High flow habitats and communities associated with Current Basin and French Pass.
Experiential Values	- Visually dramatic current movement. Submerged ridge forming a distinctive reef across the narrows of French Pass.

3. D'Urville Islands	
Abiotic Values	- Highly exposed islands and headlands, which display steep and exposed rocky sea cliffs and windswept coastlines. - Strong currents sweep around the top of D'Urville Island and through Stephens Passage. - The islands are above water remnants of ancient ridges and spurs directly associated with the drowned valley system which formed the Marlborough Sounds. - Outer Islands are largely made up of sedimentary strata and schist.
Biotic Values	- Isolated Islands contain unique species including tuatara and king shag. - Very low levels of modification to all islands which contain endemic shrublands, herbfields and tussockland communities. - Largely unmodified and highly diverse near-shore coastal marine environment ranging from very exposed to very sheltered shores. - Complex rock reef and high current habitats distinguish the marine area. - Extensive bryozoan coral beds, notably between Rangitoto Islands and D'Urville Island. - Trio and Stephens Islands are predator free. - Spectacular coastal cliffs on Rangitoto and Stephens Islands.
Experiential Values	- Exceptional characteristics that are clearly linked with the area's exposure to the sea, and its rugged and exposed appearance. - Limited or no levels of modification.
4. Chetwode and Titi Islands	
Abiotic Values	- The Chetwode and Titi Islands are generally characterised by steep rock scarps and exposed cliffs. - Many spectacular rock stacks are present at the southern end of the Chetwode Islands.
Biotic Values	- Titi and Chetwode Islands are predator free. - Very low levels of modification to all islands, which contain endemic shrublands, herbfields and tussockland communities. Steep rock scarps contain tough native shrubs and species endemic to the region such as the Cook Strait Kowhai. - The Chetwodes are the most ecologically significant islands in the Marlborough Sounds harbouring the yellow crowned parakeet, mohua, robin, kaka and rare indigenous vegetation and plant species. - Near-shore areas retain high marine natural values, including high current habitats supporting bryozoan corals, sponges, hydroids, ascidians, horse mussels and associated species (e.g. fish).
Experiential Values	- Characteristics clearly linked with the area's exposure to the sea, rugged and exposed in appearance.
5. Eastern Arapawa Island and The Brothers	
Abiotic Values	- Dynamic features and processes are largely driven by southerly winds and swells which impact upon the exposed eastern shores, creating a very high energy coastline. - Strong tidal currents are a feature especially around The Brothers Islands, near Tory Channel and off major headlands.
Biotic Values	- The eastern flanks of Arapawa Island support some of the best remaining examples of Cook Strait mixed broad-leaved forests and are nationally important, especially as possum-free environments.

	- The Brothers Islands harbour nationally important reptiles (tuatara, duvaucels gecko). - South Brothers Island is one of the most pristine seabird islands in New Zealand. - Largely unmodified exposed rocky coastal marine environment extending over many tens of kilometres. - Diverse and productive reef communities with high macroalgae diversity.
Experiential Values	- Dramatic coastal processes are highly legible along the length of these steep coastal cliffs and rocky reefs, with minimal modification. - The Brothers Islands are a clearly legible group of islands representing some of the most exposed islands in the Region. - The eastern entrance to Tory Channel is the gateway to the Marlborough Sounds for passengers on the Cook Strait ferries.
6. Croisilles Harbour	
Abiotic Values	- Whangarae Estuary is the only spit-formed estuary in the Marlborough Sounds. - Pakiaka Point barrier island and lagoon are regionally significant features. - Exposed, prominent rugged headland of Cape Soucis forms the regions western extent. - Islands to north of harbour.
Biotic Values	- Croisilles Harbour marine environment supports a unique shallow sand community notable for the presence of the New Zealand lancelet (the southern-most population of this patchily distributed species). - Largely unmodified near-shore coastal marine environment ranging from semi-sheltered to very sheltered shores. - Whangarae Estuary is an excellent example of a relatively unmodified estuary in Marlborough. - Subtidal sand flat and boulder bank habitats/communities at the mouth of Croisilles Harbour. - Island communities here are nationally important (Motuanauru Island and Otuhaereroa Island). They are distinct and rare biotic assemblages, which are highly productive. - Upland altitudinal forest tracks.
Experiential Values	- High levels of naturalness due to limited modification to the waterbody. - Islands to north of harbour and Cape Soucis headland create a visual entrance and are unmodified.

7. Maud Island	
Abiotic Values	- The Island landform of steep to moderately steep coastal hills with inlets and bays retains a high maritime influence. - The Island forms a distinct pyramidal form with a slender landform connecting Maud Island to Harter Point.
Biotic Values	- Internationally significant, predator free Island sanctuary. - Harbours nationally threatened species of invertebrates, birdlife and the entire population of the Maud Island Frog. - Home Bay contains 15 hectares of remnant bush including kohekohe, tawa, nikau, pukatea and mahoe. - Most of the Island is cloaked in regenerating shrubland and forest. - Several species of plants uncommon in Marlborough Sounds occur on Maud Island including the large-leaved milk tree, Sonchus kirkii and renga renga lily. - Sheltered coastline with multiple aspects. - Near-shore marine areas retain high natural values.
Experiential Values	- Distinct island landform, pyramidal skyline and slender neck of Harter Point is very evident. - Vegetation predominates views of the island which straddles the inner and outer Marlborough Sounds.
8. Tennyson Inlet and Inner Pelorus Sound	
Abiotic Values	- The coastline is moderately dissected with numerous large, deeply indented inlets and smaller bays. - Very sheltered with limited wave fetch. - Three islands are strategically located at the entrance of Tennyson Inlet.
Biotic Values	- Much of the area is backed by native forest clad hillslopes. - Intact coastal forest extends to the water's edge, some of the largest tracts of lowland forest in Marlborough. - Largely intact and nationally significant altitudinal sequences of primary forest, extending from ridgetops to seafloor. - Vegetation comprises coastal podocarp/broadleaved forest at lower altitudes and mature beech forest that stretches to the summits of the hills. These sequences extend north into Tennyson Inlet and south into Nydia Bay. - Some plant communities are possum free. - Tennyson Inlet is the largest marine area in Marlborough surrounded by protected native forest. Much of the coast extending from the head of Nydia Bay along the western side of Pelorus Sound to Jacobs Bay is also clad in native bush. - Marine habitats and communities are mostly unmodified and retain high natural values.
Experiential Values	- This area retains an overwhelming sense of naturalness, from shore to ridge. - Access is limited to this area by one road: Tennyson Inlet Road. - The Nydia Track connects Tennyson Inlet and Nydia Bay with Kaiuma Bay, north of Havelock through mainly forested slopes. - The area includes rare examples of sheltered inland inlets with limited modification to the water and the shores.

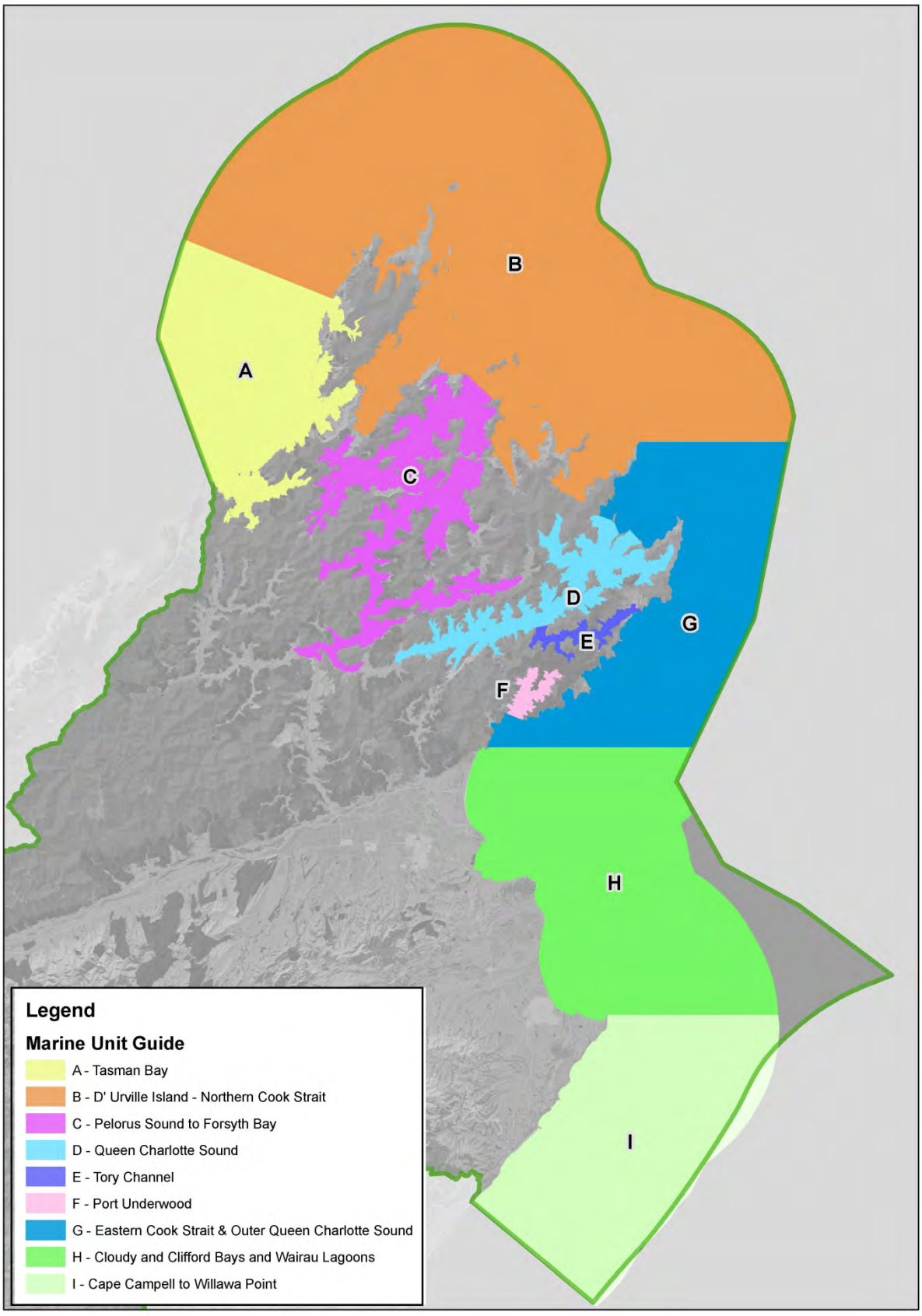
9. The Capes	
Abiotic Values	- Cape Jackson is a superb example of a drowned ridge crest. - Cliffs and very steep slopes flank the sea and are being continually eroded by high energy waves. - Strong tidal currents off headlands. - Reefs fringe the shore and extend into deeper water, especially off the headlands.
Biotic Values	- Brutal exposure to the elements has shaped unique Cook Strait vegetation on the headlands of Capes Lambert and Jackson. - Largely unmodified section of coast with exposed rocky bluffs and headlands and reef communities extending into deep water. - Cape Lambert Scenic Reserve. - High current communities in the vicinity of The Capes.
Experiential Values	- The Capes and the waters they enclose are remote and retain a wild and exposed nature due to their narrow and rugged form. - They act as the outer 'arms' of Port Gore, where rocky outcrops and partially submerged platforms extend into the sea and offer opportunities for fishing. - Cape Jackson forms the western entrance to Queen Charlotte Sound where biotic patterns extend from Mt. Stokes and Mt. Furneaux further inland.
10. Ship Cove and Resolution Bay	
Abiotic Values	- Very steep sided faces clothed in indigenous vegetation. - Highly indented coastline comprising several sheltered small bays.
Biotic Values	- Mt Furneaux features nationally significant podocarp/broadleaved forest. Forest between Ship Cove and Resolution Bay is distinctive and regionally outstanding, displaying intact natural sequences from sea to ridge top. - Largely unmodified sheltered near-shore and in places offshore marine environment backed by bush clad hills.
Experiential Values	- This mostly sheltered coastline with its clear waters and forested backdrop is particularly memorable. - Ship Cove is generally the start of the Queen Charlotte Track. - The area retains a reasonably high level of remoteness, due to its location between the inner and outer Sounds.

11. Islands of Queen Charlotte Sound and White Rocks	
Abiotic Values	- Marine submergence has created Blumine, Pickersgill, Long, The Twins, Motungarara and Motuara Islands, which are separated from the mainland and the larger Arapawa Island by narrow passages. - Long Island cuspate foreland is a regionally important geological feature. - The islands have an exposed, steep and rocky character to the north and more sheltered southern tips. - White Rocks are a good example of a very small, exposed, sparsely-soiled rock stack system.
Biotic Values	- All Islands within this outstanding natural character area are predator free. - Long Island harbours the endangered little spotted kiwi. - Pickersgill Island is regionally significant for its flora and fauna. - Motuara Island features regenerating bush and many species of native bird endangered on mainland New Zealand. - Blumine Island is home to the world's most endangered Kiwi, the rowi and other endangered New Zealand birds. Features regenerating bush. - A marine reserve of national significance surrounds Long Island and Kokomohua Island. - Largely unmodified near-shore and in places off-shore marine environment. - Unmodified White Rocks holds a unique ecosystem with limited flora and is a breeding colony for the nationally endangered king shag.
Experiential Values	- The steep and often rugged bush clad slopes are highly natural. - This network of islands and rocks combine to create a memorable experience for visitors to the outer Queen Charlotte Sound.
12. Mt Stokes	
Abiotic Values	- Mt. Stokes is one of the most dominant landforms in the Marlborough Sounds, with its upland ridge crests and summits reaching 1,203m above sea level. - A number of watercourses extend from this central massif, and have long, high gradients with the water quality being amongst the highest in the Sounds.
Biotic Values	- Original forest covers most of the upper slopes of Stokes massif and its summit supports the only occurrence of subalpine vegetation in the Sounds. - Natural biodiversity is high due to the range of altitude, landform and habitat types; especially enhanced by subalpine communities.
Experiential Values	- The area straddles the inner and outer Sounds, where extreme weather can also play an important aspect in the areas experiential values. - The mountain top and associated ridges define and frame the associated bays and due to their lack of modification, retain very high remote and experiential values.

13. Pelorus Estuary	
Abiotic Values	- Extensive and uniform intertidal flats at the mouth of the Pelorus River. - Largely intact estuarine hydrological processes.
Biotic Values	- Biotic patterns and sequences, dynamics and process functioning are largely intact. - Distinctive remnant alluvial communities are largely intact in the estuary and also for the upper hillslopes, although now reduced to scattered treelands, and include fertile podocarp and mixed broadleaved treeland, and semi-deciduous kowhai-ribbonwood-lacebark treelands. - Estuarine and adjoining freshwater wetland communities are extensive, very distinctive, regionally outstanding, and provide important habitats.
Experiential Values	- The intertidal river delta, with its network of small waterways and extensive saltmarsh beds is extremely memorable. - Despite modifications around parts of its perimeter, this large estuary holds high levels of perceived naturalness.
14. Wairau Lagoons	
Abiotic Values	- The Wairau Lagoons estuary is a distinctive feature of this coastline – a 2,300ha system of interlinked channels, broad shallow lagoons, small islands and expansive intertidal flats, forming a unique and nationally significant coastal lagoon-estuarine system. - The Wairau Lagoons and Bar have been identified as nationally significant intact landforms. - Geopreservation site includes: Wairau boulder barrier; lagoon; and delta.
Biotic Values	- Extensive glasswort herbfields are a distinctive feature. Other species such as rushes, sedges, estuarine herbs and grasses feature around the fringes. - Nationally significant for wading birds (including migratory species), waterfowl and other wetland birds with almost 90 recorded species – the majority being native and more than a quarter endangered, vulnerable or rare.
Experiential Values	- Aesthetically interesting and broadly unmodified landforms of the estuarine landscape and boulder bank. - Expansive sea views out to Cloudy Bay, backdropped by the White Bluffs/Te Parinui o Whiti, which are visually impressive.

15. Cape Campbell	
Abiotic Values	- This area is influenced by the cold Southland Current, and is frequently exposed to high energy swells and storms from the south and east. - Broad and deeply incised shore platforms and offshore reefs characterise the marine environment in the vicinity of Cape Campbell. - Mussel Point forms another prominent reef structure marking the western boundary of this area. - High limestone cliffs extend between Mussel Point and Cape Campbell.
Biotic Values	- The reefs support moderate numbers and diversity of plants and animals with the greatest diversity located subtidally within channels, pools and partially sheltered areas of the reefs. - Large offshore beds of giant kelp (Macrocystis pyrifera). - Largely unmodified coastal marine environment.
Experiential Values	- Access to this remote and rugged coastline is limited. - The coast is largely unmodified with no aquaculture or jetties/wharves. The area, once visited, is extremely memorable.
16. Chancet Rocks and The Needles	
Abiotic Values	- This area is influenced by the cold Southland Current, and is frequently exposed to high energy swells and storms from the south and east. Inshore coastal waters are cloudy due to sedimentation from the Flaxbourne, Clarence and Waima (Ure) Rivers and erosion of the soft cretaceous rocks of this coast by wave action. - The limestone features and wave cut platforms of the Needles and Chancet Rocks are unique to this coastline and have been identified as individual geopreservation sites due to their unique geological makeup.
Biotic Values	- There are colonies of NZ fur seals at Chancet Rocks and The Needles. - Limestone reef communities.
Experiential Values	- The wave cut platforms and reefs of Chancet Rock and the Needles are prominent features displaying limited modification. - This coast is characterised by rocky reefs and stacks interspersed with sand or gravel beaches. Access is limited to only a few locations.

Source: Boffa Miskell. June 2014. Natural Character of the Marlborough Coast: Defining and Mapping the Marlborough Coastal Environment. Prepared for Marlborough District Council.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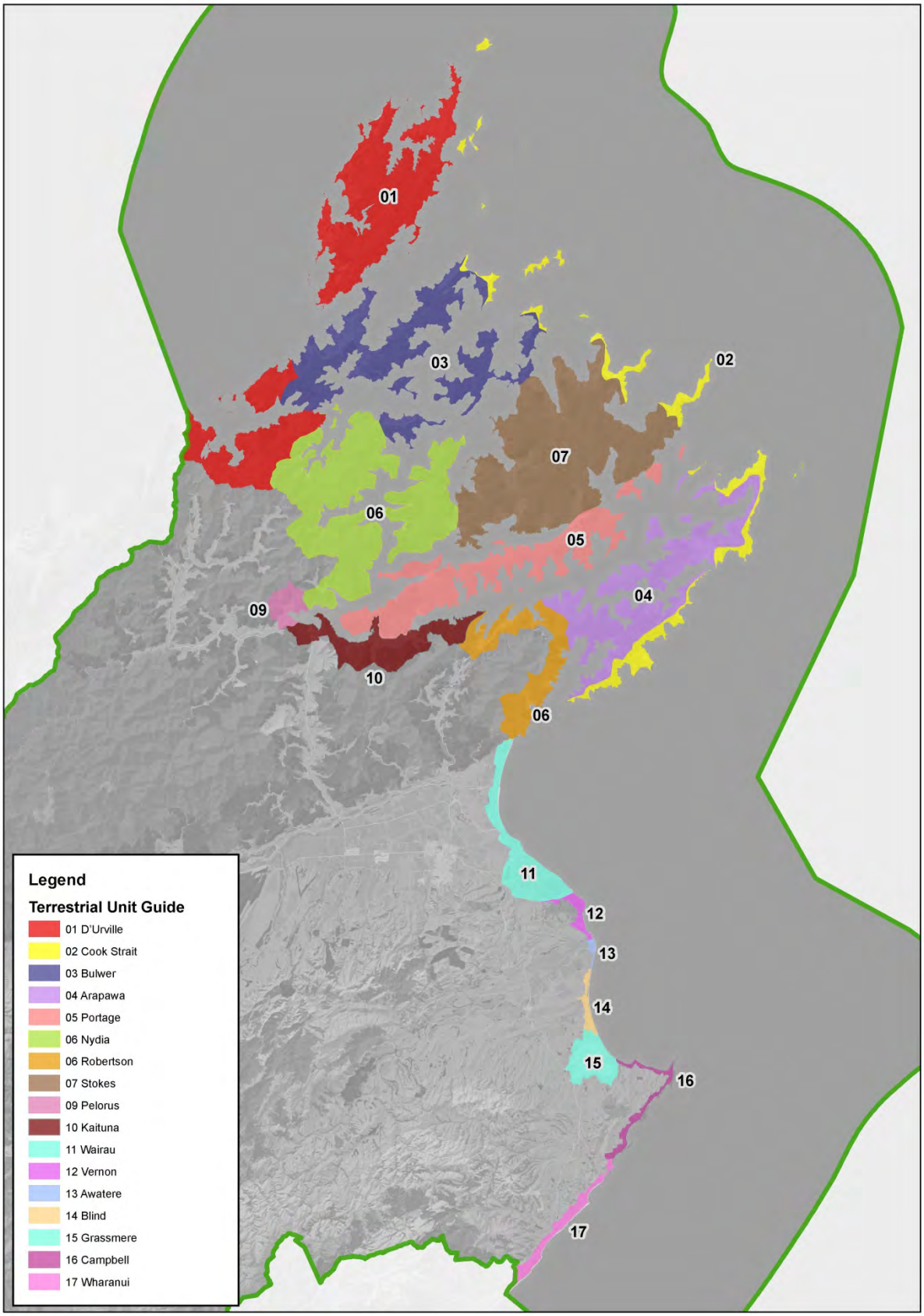
Marine Unit Guide
A - Tasman Bay
B - D' Urville Island - Northern Cook Strait
C - Pelorus Sound to Forsyth Bay
D - Queen Charlotte Sound
E - Tory Channel
F - Port Underwood
G - Eastern Cook Strait & Outer Queen Charlotte Sound
H - Cloudy and Clifford Bays and Wairau Lagoons
I - Cape Campell to Willawa Point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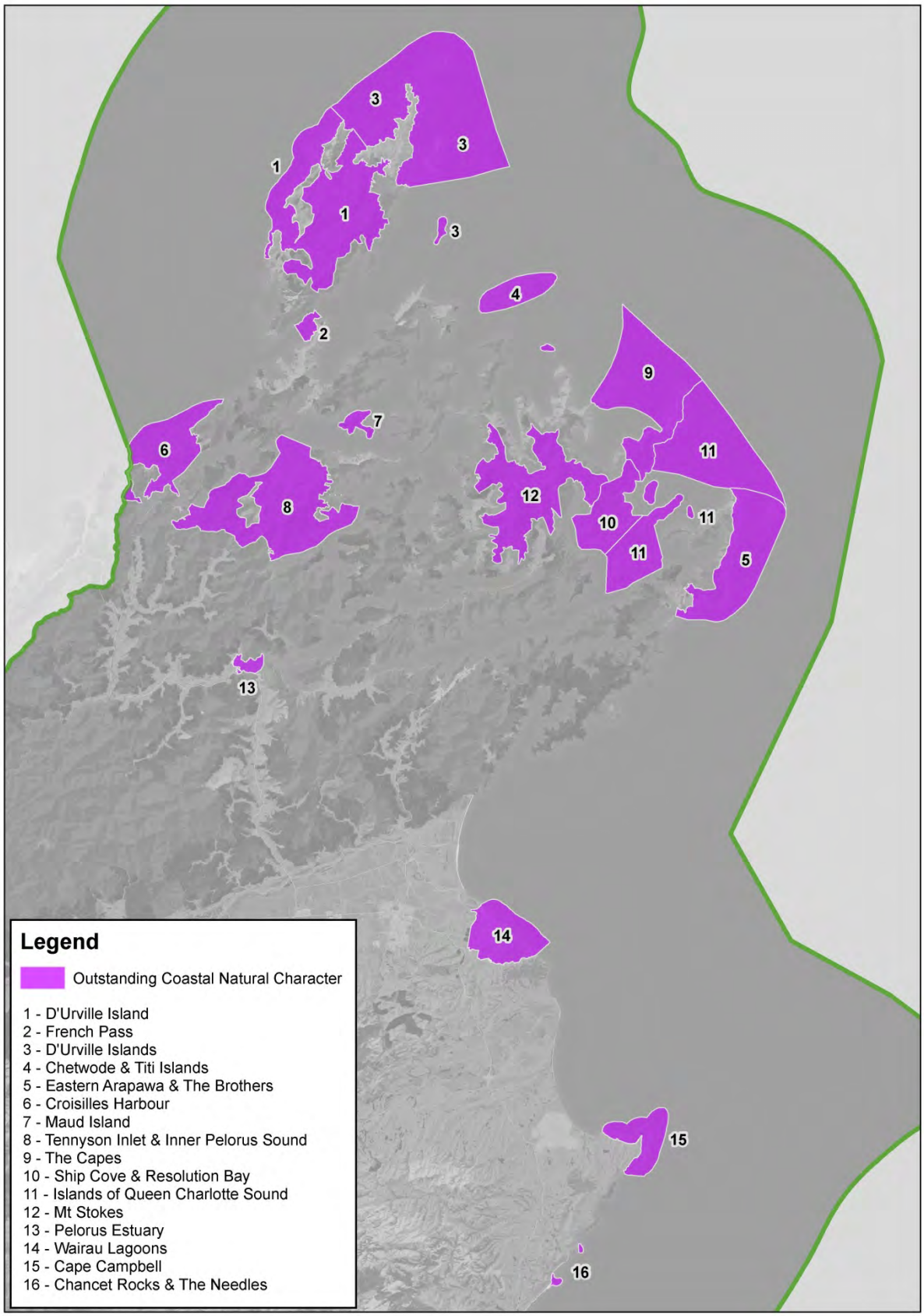
10 Kaituna
11 Wairau
12 Vernon
13 Awatere
14 Blind
15 Grassmere
16 Campbell
17 Wharanui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Outstanding Coastal Natural Character
1 - D'Urville Island
2 - French Pass
3 - D'Urville Islands
4 - Chetwode & Titi Islands
5 - Eastern Arapawa & The Brothers
6 - Croisilles Harbour
7 - Maud Island
8 - Tennyson Inlet & Inner Pelorus Sound
9 - The Capes
10 - Ship Cove & Resolution Bay
11 - Islands of Queen Charlotte Sound
12 - Mt Stokes
13 - Pelorus Estuary
14 - Wairau Lagoons
15 - Cape Campbell
16 - Chancet Rocks & The Needles

Appendix 3

Ecological Significance Criteria for terrestrial, wetland and coastal environments

The following provides explanations or guidelines for the application of ecological significance criteria in the assessment of sites.

Rankings within each criterion are: **H** = High; **M** = Medium; **L** = Low. They collectively contribute to an overall ranking, indicating the degree of significance. For a site to be considered significant, one of the first four criteria (representativeness, rarity, diversity and pattern or distinctiveness) must rank **M** or **H**.

Representativeness

1. Indigenous vegetation or habitat of indigenous fauna that is representative, typical or characteristic of the natural diversity of the relevant ecological district. This can include degraded examples where they are some of the best remaining examples of their type, or represent all that remains of indigenous biodiversity in some areas.

2. Indigenous vegetation or habitat of indigenous fauna that is a relatively large example of its type within the relevant ecological district.

3. Additionally for the coastal marine area the site is significant if it contains biological features (habitat, species, community) that represent a good example within the biogeographic area.

H: The site contains one of the best examples of the characteristic ecosystem types in the region or ecological district or biogeographic area for sites within the coastal marine area.

M: The site contains one of the better examples, but not the best, of the characteristic ecosystem types in the region or ecological district or biogeographic area for sites within the coastal marine area.

L: The site contains an example, but not one of the better or best, of the characteristic ecosystem types in the region or ecological district or biogeographic area for sites within the coastal marine area.

Rarity

4. Indigenous vegetation or habitat of indigenous fauna that has been reduced to less than 20% of its former extent in Marlborough, or relevant land environment, ecological district, or freshwater environment.

5. Indigenous vegetation or habitat of indigenous fauna that supports an indigenous species that is threatened, at risk, or uncommon, nationally or within the relevant ecological district or biogeographic area for sites within the coastal marine area.

6. The site contains indigenous vegetation or an indigenous species that is endemic to Marlborough or that are at distributional limits within Marlborough.

H: The site contains nationally threatened or rare flora, fauna or communities; or the site contains several examples of regionally or locally threatened or rare flora, fauna or communities.

M: The site contains one or a few regionally or locally (but not nationally) threatened or rare flora, fauna or communities.

L: The site is not known to contain flora, fauna or communities that are threatened or rare in the ecological district or biogeographic area, regionally or nationally.

Diversity and pattern

7. Indigenous vegetation or habitat of indigenous fauna that contains a high diversity of indigenous ecosystem or habitat types, indigenous taxa, or has changes in species composition reflecting the existence of diverse natural features or ecological gradients.

H: The site contains an unusually high diversity of species and ecosystem types.

M: The site contains a moderate diversity of species and ecosystem types.

L: The site contains a relatively low diversity of species and ecosystem types.

Distinctiveness

8. Indigenous vegetation or an association of indigenous species that is distinctive, of restricted occurrence, occurs within an originally rare ecosystem, or has developed as a result of an unusual environmental factor or combinations of factors.

H: The site contains any ecological feature that is unique nationally, in the region or in the ecological district; or it contains several such features that are outstanding regionally or in the ecological district or biogeographic area.

M: The site contains ecological features that are notable or unusual but not outstanding or unique nationally, in the region or in the ecological district or biogeographic area.

L: The site contains no ecological features that are outstanding or unique nationally, in the region or in the ecological district or biogeographic area; i.e. the ecological features are typical rather than distinctive or special.

Size and shape

9. The site is significant if it is moderate to large in size and is physically compact or cohesive.

H: The site is large in size for the region or ecological district and is compact in shape.

M: The site is moderate in size for the region or ecological district and is compact in shape; or the site is relatively large but not very compact or cohesive.

L: The site is small in size for the region or ecological district, or the site is moderate in size but not at all compact or cohesive.

Connectivity/ecological context

10. 1Vegetation or habitat of indigenous fauna that provides or contributes to an important ecological linkage or network, or provides an important buffering function.

11. A wetland which plays an important hydrological, biological or ecological role in the natural functioning of a river or coastal system.

12. Indigenous vegetation or habitat of indigenous fauna that provides important habitat (including refuges from predation, or key habitat for feeding, breeding, or resting) for indigenous species, either seasonally or permanently.

H: The site is close or well connected to a large natural area or several other natural areas.

M: The site is in the vicinity of other natural areas but only partially connected to them or at an appreciable distance.

L: The site is very isolated from other natural areas.

Sustainability

13. The site is significant if it is ecologically resilient, i.e. its natural ecological integrity and processes (functioning) are largely self-sustaining.

H: The site can maintain its ecological integrity and processes with minimal human assistance.

M: The site requires some but not much human assistance to maintain its ecological integrity and processes.

L: The site requires much human assistance to maintain its ecological integrity and processes.

Adjacent catchment modification in respect of significant sites within the coastal marine area

14. Catchments that drain large tracts of land can lead to high sediment loading into adjacent marine areas. A site in the coastal marine area is significant if the adjacent catchment is >400 ha and clad in relatively mature native vegetative cover resulting in a long term stable environment with markedly reduced sediment and contaminant run-off compared to developed or modified catchments.

H: The site is dominated by an adjacent land catchment area with stable and relatively mature native vegetation (>400ha) that is legally protected.

M: The site is dominated by an adjacent land catchment area with stable and relatively mature native vegetation (>400ha) with partial or no legal protection.

L: The site is surrounded by an adjacent land catchment area (>400ha) that is farmed, highly modified or has limited relatively mature vegetative cover.

Appendix 4

Criteria for Determining Significant Adverse Effects

The criteria below assists in determining whether a subdivision, use or development proposal will have significant adverse effects. The criteria shall be applied by the decision maker on resource consents or plan changes.

1. Character and degree of modification, damage, loss or destruction;

2. Duration and frequency of effect (for example long-term or recurring effects);

3. Magnitude or scale of effect (for example number of sites affected, spatial distribution, landscape context);

4. Irreversibility of effect (for example loss of unique or rare features, limited opportunity for remediation, the costs and technical feasibility of remediation or mitigation);

5. Resilience of heritage value or place to change (for example ability of feature to assimilate change, vulnerability of feature to external effects).

Appendix 5

Water Resource Unit Values & Water Quality Classification Standards

Abbreviations

A	aesthetic	AE	aquatic ecosystem	C	cultural
CR	contact recreation	F	fisheries	FS	fish spawning
NS	natural state	SG	shellfish gathering	WS	water supply

Schedule 1 – Water Resource Unit Values

No.	Water Resource Unit	Values	Water Quality Classifications
1	Acheron (includes Fish lake in the Wairau River catchment)	**Fish habitat** Alpine Galaxias, dwarf galaxias, koaro, northern flathead galaxias, longfin eel, shortfin eel, tarndale bully and upland bully habitat. Only known habitat for tarndale bully. Brown trout/salmon spawning. **Bird Habitat** Wetland species, black-fronted terns, southern crested grebe, and banded dotterel. Paradise shelduck moulting site. Braided river birds. **Aquatic Macrophytes** Intact indigenous aquatic macrophytes community. **Recreation** Waterfowl hunting, fishing, canoeing, rafting and passive recreation. **Public Access** Large areas of catchment administered by Department of Conservation (DOC) but subject to lease constraints. **Natural Character** High. **Significant Wetlands** Tarndale Lakes - nationally significant wetlands complex.	AE, FS, F, A

No.	Water Resource Unit	Values	Water Quality Classifications
2	Cullens/Linkwater Complex	**Fish Habitat** Banded kokopu, shortjaw kokopu, red fin bully, common bully, īnanga, longfin eel and shortfin eel habitat. **Invertebrate Habitat** Kōura habitat. **Riparian Habitat** Intact indigenous forest in upper catchment. Coastal wetlands.	AE, FS
3	Anakoha	**Fish Habitat** Banded kokopu, shortjaw kokopu, dwarf galaxias, īnanga, giant kokopu, koaro, longfin eel and redfin bully habitat. **Riparian Habitat** Intact indigenous forest in upper catchment. Coastal wetland.	AE, FS
4	Are Are	**Fish Habitat** Black flounder, common bully, īnanga, lamprey, longfin eel, redfin bully, upland bully and shortfin eel habitat. High species diversity. Juvenile trout habitat. **Invertebrate Habitat** High numbers of kōura.	AE, FS
5	Avon	**Fish Habitat** Northern flathead galaxias, koaro, longfin eel and upland bully habitat. Landlocked koaro in Lake Alexander. Trout and eels absent from Lake Alexander. Brown trout spawning in rivers and streams. **Invertebrate Habitat** Subterranean amphipods habitat in Lake Alexander outlet. Kōura Habitat in rives and streams. **Riparian Habitat** Pink and weeping broom in riparian margins. Indigenous vegetation in upper catchment and surrounding Lake Alexander. **Recreation** Walking access to Lake Alexander. **Natural Character** High.	AE, FS, A (the A classification only applies to the Tummel River upstream of 1655960E 5381760N and Lake Alexander)

No.	Water Resource Unit	Values	Water Quality Classifications
6	Awatere - Lower	**Fish Habitat** Īnanga, common bully, upland bully, giant bully, bluegill bully, torrentfish, longfin eel and shortfin eel habitat. Īnanga spawning in coastal lagoon. Brown trout habitat. **Bird Habitat** Banded dotterel, black-fronted dotterel and black-fronted terns. Braided river birds. Paradise shelduck moulting on Lake Jasper. **Riparian Habitat** Wetland vegetation surrounding Lake Jasper. **Recreation** Fishing and whitebaiting.	AE, FS, F
7	Awatere - Upper	**Fish Habitat** Northern flathead galaxias, koaro, upland bully and longfin eel habitat. Brown trout habitat. **Bird Habitat** Black-fronted tern. **Recreation** Molesworth Recreational Reserve. Upland game hunting. **Public Access** Large areas of catchment administered by DOC but subject to lease constraints. Access track to the Hodder huts and Mt Tapuaenuku via private land and Hodder River. **Natural Character** Very high. **Riparian Habitat** Largest population of northern pink broom in Marlborough – Riparian Margins Grey River.	AE, FS
8	Bartletts	**Fish Habitat** Dwarf galaxias, longfin eel, shortfin eel and upland bully habitat. Dwarf galaxias spawning. Brown trout spawning. **Riparian Habitat** Indigenous vegetation in upper catchment. **Recreation** Swimming and fishing.	AE, FS, F, CR

No.	Water Resource Unit	Values	Water Quality Classifications
9	Black Birch	**Fish Habitat** Torrentfish, northern flathead galaxias, upland bully redfin bully and longfin eel habitat. Brown trout spawning. **Invertebrate Habitat** Kōura Habitat. **Riparian Habitat** Large proportion of riparian vegetation is indigenous. **Public Access** Access to DOC administered land via stream bed only. **Water supply catchment** Seddon municipal.	AE, FS, WS
10	Blenheim Springs	**Fish Habitat** Banded kokopu, giant kokopu, lamprey, common bully, upland bully, longfin eel and shortfin eel habitat. Brown trout habitat. **Invertebrate Habitat** Kōura and freshwater mussel habitat. Subterranean aquatic macroinvertebrates habitat in spring outlets. **Aquatic Macrophytes** Largest population of the indigenous *Potomogeoton cheesemannii* on the Wairau Plain. **Recreation** Pollard park, duck feeding, children playing and picnicking. **Aesthetic** Water clarity.	AE, FS, A
11	Blind River	**Fish Habitat** Banded kokopu, common bully, upland bully, longfin eel and shortfin eel are present. **Bird Habitat** Coastal lagoon habitat for banded dotterel, black shag. New Zealand scaup and other waterfowl. **Invertebrate Habitat** Shield shrimp habitat in ephemeral pools. Kōura Habitat. **Riparian Habitat** Red rock daisy and other threatened species in upper gorges. **Recreation** Waterfowl hunting.	AE, FS

No.	Water Resource Unit	Values	Water Quality Classifications
12	Boundary Creek Complex	**Fish Habitat** Dwarf galaxias, īnanga, bluegill bully, common bully, upland bully, black flounder, longfin and shortfin eel habitat. Brown trout spawning. **Invertebrate Habitat** Kōura and freshwater mussel habitat. **Riparian Habitat** *Teucridium parvifolium* and *Urtica linearifolia* habitat. **Bird Habitat** Black-fronted tern feeding habitat.	AE, FS
13	Branch (including Lake Argyle)	**Fish Habitat** Alpine galaxias, dwarf galaxias, koaro, northern flathead galaxias, upland bully, longfin and shortfin eel habitat. Brown and rainbow trout habitat. Brown trout spawning. **Bird Habitat** Black-fronted tern feeding habitat. Shag and waterfowl habitat. **Riparian Habitat** Intact indigenous forest in upper catchment. **Recreation** Highly valued trout fishery. Back country experience. Waterskiing, fishing and model boating. **Natural Character** Very high (Leatham River and Branch River upstream of weir). **Hydro Electric Generation**	AE, FS, F
14	Centre Valley Complex	**Fish Habitat** Common bully, upland bully, longfin eel, and shortfin eel habitat.	AE, FS

No.	Water Resource Unit	Values	Water Quality Classifications
15	Clarence	**Fish habitat** Northern flathead galaxias, dwarf galaxias, koaro and longfin eel habitat. Brown trout/salmon spawning. **Bird Habitat** Wetland species, black-fronted terns and southern crested grebe. Paradise shelduck moulting site. Braided river birds. **Invertebrate Habitat** Freshwater mussels. **Aquatic Macrophytes** Intact indigenous aquatic macrophytes community. **Recreation** Waterfowl hunting, fishing, canoeing, rafting, jet boating and passive recreation. **Public Access** Large areas of catchment administered by DOC but subject to lease constraints. **Significant Wetlands** Lake McRae - nationally important scientific feature.	AE, FS, F, A
16	Coastal Wairau Complex	**Fish Habitat** Īnanga, common bully, upland bully, longfin eel and shortfin eel habitat. Inanga spawning habitat. **Bird Habitat** Bittern and waterfowl habitat. **Riparian Habitat** *Urtica linearifolia* habitat. Significant indigenous wetland vegetation in Rarangi dune system. **Recreation** Waterfowl hunting, whitebaiting.	AE, FS
17	Doctors	**Fish Habitat** Īnanga, common bully, upland bully, longfin eel and shortfin eel habitat. Brown trout habitat. **Invertebrate Habitat** Kōura and freshwater mussel habitat.	AE, FS
18	East Coast Complex	**Fish Habitat** Common Bully and shortfin eel habitat. **Bird Habitat** Coastal wetlands habitat for New Zealand scaup and marsh crake. **Riparian Habitat** Willow free coastal wetland communities. Remnant indigenous species along streams.	AE, FS

No.	Water Resource Unit	Values	Water Quality Classifications
19	Fairhall	**Fish Habitat** Īnanga, upland bully and shortfin eel habitat.	AE, FS
20	Flaxbourne	**Fish Habitat** Black flounder, common bully, bluegill bully, upland bully, giant bully, īnanga, longfin eel and shortfin eel habitat. Bird Habitat Lake Elterwater habitat for pied stilts, dabchick, shags, paradise shelduck, grey teal and waterfowl. Paradise duck moulting area. **Recreation** Whitebaiting, gamebird hunting. **Water supply catchment** Private community supplies.	AE, FS, WS
21	Gibsons	**Fish Habitat** Īnanga, common bully, lamprey, longfin eel and shortfin eel habitat. Brown trout present. **Invertebrate Habitat** Kōura habitat. **Riparian Habitat** Fault associated wetlands. **Recreation** Waterfowl hunting.	AE, FS
22	Goulter	**Fish Habitat** Koaro and upland bully habitat. Landlocked population of koaro in Lake Chalice scientifically important. Brown trout spawning in Goulter River. **Riparian Habitat** Intact indigenous forest in upper catchment. **Recreation** Regionally significant brown trout fishery and tramping. **Natural Character** Very high.	AE, FS, F, NS, A
23	Graham	**Fish Habitat** Shortkaw kokopu, banded kokopu, īnanga, common bully, bluegill bully, redfin bully, dwarf galaxias, longfin eel and shortfin eel habitat. **Riparian Habitat** Intact indigenous forest in upper catchment. **Natural Character** High.	AE, FS

No.	Water Resource Unit	Values	Water Quality Classifications
24	Grovetown	**Fish Habitat** Īnanga, giant kokopu, common bully, upland bully, black flounder, longfin eel and shortfin eel habitat. Brown trout present. **Invertebrate Habitat** Kōura and freshwater mussel habitat. **Bird Habitat** Grey duck, Australasian shoveler, New Zealand scaup, paradise shelduck, black swan, shag, kotuku, pukeko, white-faced heron and spotless crake habitat. Paradise shelduck and black swan moulting area. **Aquatic Macrophytes** The uncommon native submerged marcophyte *Potamogeton orchreatus* is present. **Riparian Habitat** Indigenous vegetation restoration project around Grovetown Lagoon. *Urtica linearifolia* habitat. **Recreation** Food gathering, waterfowl hunting, canoeing.	AE, FS
25	Kaituna	**Fish Habitat** Dwarf galaxias, upland bully and longfin eel habitat. Brown trout spawning. **Bird Habitat** Wildfowl habitat. **Recreation** Wildfowl hunting, fishing.	AE, FS, F
26	Kaiuma	**Fish Habitat** Common bully, banded kokopu and longfin eel habitat. **Riparian Habitat** Intact indigenous forest in upper catchment. Swamp Maire in riparian margin. **Recreation** Waterfowl hunting.	AE, FS
27	Kenepuru	**Fish Habitat** Dwarf galaxias, īnanga, bluegill bully, giant bully, redfin bully, common smelt and longfin eel habitat. **Bird Habitat** Weka habitat in riparian margins. **Riparian Habitat** Intact indigenous forest in upper catchment. Patches of indigenous riparian vegetation in lower reaches. **Natural Character** High.	AE, FS

No.	Water Resource Unit	Values	Water Quality Classifications
28	Medway	**Fish Habitat** Dwarf galaxias, upland bully, torrentfish, longfin eel and shortfin eel habitat. Brown trout habitat. **Riparian Habitat** Pink broom and other indigenous species present. **Recreation** Upland game hunting.	AE, FS
29	Northbank Complex	**Fish Habitat** Īnanga, koaro, dwarf galaxias, common bully, redfin bully, upland bully, torrentfish, lamprey, longfin eel and shortfin eel habitat. Brown trout habitat. **Riparian Habitat** Intact indigenous forest in upper catchment.	AE, FS
30	Ōhinemahuta (previously Onamalutu)	**Fish Habitat** Giant kokopu, common bully, redfin bully, bluegill bully, upland bully and longfin eel habitat. Brown trout spawning. **Riparian Habitat** Intact indigenous forest in upper catchment. **Recreation** Swimming, fishing and recreational reserve. **Natural Character** High.	AE, FS, F, CR
31	Omaka	**Fish Habitat** Upland bully and longfin eel habitat. Brown trout spawning. **Riparian Habitat** Indigenous species in upper catchment. **Recreation** Upland game and waterfowl hunting. **Natural Character** Very high (above Tyntesfield Road).	AE, FS
32	Opouri	**Fish Habitat** Dwarf galaxias, upland bully and longfin habitat. Brown and rainbow trout habitat. Brown trout spawning. **Riparian Habitat** Lowland podocarp riparian margins. Intact indigenous forest in upper catchment. *Leptinella nana* habitat. **Recreation** Fishing and gamebird hunting.	AE, FS, F

No.	Water Resource Unit	Values	Water Quality Classifications
33	Ōpaoa - Lower (previously Opawa)	**Fish Habitat** Īnanga, common bully, giant bully, upland bully, black flounder, yelloweye mullet, grey mullet, longfin and shortfin eel habitat. Īnanga spawning habitat. Brown trout habitat. **Bird Habitat** Royal spoonbill, fernbird, kotuku, crake and waterfowl habitat. **Riparian Habitat** Indigenous coastal riparian margins. Riparian enhancement occurring in selected locations. **Recreation** Swimming, canoe/kayaking, whitebaiting, fishing, gamebird hunting and boating.	AE, FS, F, CR
34	Ōpaoa – Upper (previously Opawa)	**Fish Habitat** Īnanga, black flounder, upland bully, common bully, longfin eel and shortfin eel habitat. Brown trout habitat. **Bird Habitat** Kotuku, bittern and waterfowl habitat. **Recreation** Canoe/kayaking, boating, whitebaiting, fishing, swimming and gamebird hunting.	AE, FS, F, CR
35	Patriarch	**Bird Habitat** Black-fronted tern feeding habitat. **Riparian Habitat** River terrace wetlands. **Recreation** Gamebird hunting.	AE, FS
36	Pelorus / Te Hoiere - Lower	**Fish Habitat** Banded kokopu, inanga, dwarf galaxias, bluegill bully, common bully, giant bully, redfin bully, upland bully, grey mullet, longfin eel and shortfin eel habitat. Brown and rainbow trout habitat. Brown trout spawning in tributaries. **Bird Habitat** Banded rail, fernbird and waterfowl habitat. **Invertebrate Habitat** Kōura and freshwater mussel habitat. **Riparian Habitat** Lowland podocarp riparian margins. Estuarine and riverside wetlands. **Recreation** Swimming, kayaking, fishing and gamebird hunting.	AE, FS, F, CR

No.	Water Resource Unit	Values	Water Quality Classifications
37	Pelorus / Te Hoiere - Upper	**Fish Habitat** Common bully, redfin bully, upland bully, smelt, longfin eel and shortfin eel habitat. Brown and rainbow trout spawning. **Riparian Habitat** Intact indigenous forest in upper catchment. *Scutellaria* habitat. **Recreation** Swimming, kayaking, tramping and fishing. **Natural Character** Very high.	AE, FS, F, CR, NS, A
38	Pine Valley	**Fish Habitat** Dwarf galaxias, upland bully, redfin bully, longfin eel and shortfin eel habitat. Brown trout spawning. **Riparian Habitat** Intact indigenous forest in upper catchment. **Recreation** Swimming and tramping.	AE, FS, CR
39	Pukaka	**Fish Habitat** Īnanga, dwarf galaxias, common bully, bluegill bully, redfin bully, upland bully, lamprey, longfin eel and shortfin eel habitat. Brown trout spawning. **Riparian Habitat** Intact indigenous forest in upper catchment. Chaytor Reserve. Swamp maire in riparian. Riparian wetlands. **Recreation** Tramping.	AE, FS
40	Rai	**Fish Habitat** Dwarf galaxias, bluegill bully, redfin bully, upland bully, torrentfish, lamprey, shortfin eel and longfin eel. Brown and rainbow trout spawning. **Invertebrate Habitat** Freshwater mussel habitat. **Riparian Habitat** Lowland podocarp riparian margins. Intact indigenous forest in upper catchment. *Leptinella nana* habitat. **Recreation** Swimming, fishing, rafting, kayaking and gamebird hunting.	AE, FS, F, CR

No.	Water Resource Unit	Values	Water Quality Classifications
41	Ronga	**Fish Habitat** Dwarf galaxias, koaro, upland bully, longfin eel and shortfin eel habitat. Brown trout habitat. **Riparian Habitat** Intact indigenous forest in upper catchment. **Recreation** Fishing.	AE, FS, F
42	Seventeen Valley Complex	**Fish Habitat** Īnanga, common bully, longfin eel and shortfin eel habitat. **Bird Habitat** Royal spoonbill, wading birds and waterfowl. **Recreation** Wither Hills Farm Park and gamebird hunting.	AE, FS
43	Spring Creek	**Fish Habitat** Īnanga, giant kokopu, banded kokopu, black flounder, common bully, upland bully, lamprey, longfin eel and shortfin eel habitat. Brown and rainbow trout habitat. **Invertebrate Habitat** Kōura, freshwater mussel and freshwater shrimp habitat. **Bird Habitat** Shag and waterfowl habitat. **Aquatic Macrophytes** *Potomogeoton cheesemannii* in upper reaches of Spring Creek. **Riparian Habitat** Planting of indigenous plats in the lower reaches. **Recreation** Kayaking, fishing, gamebird shooting. **Aesthetic** Water clarity.	AE, FS, F, A

No.	Water Resource Unit	Values	Water Quality Classifications
44	Taylor River	**Fish Habitat** Īnanga, koaro, common bully, upland bully, yelloweye mullet, longfin eel and shortfin eel habitat. Brown and rainbow trout habitat. **Bird Habitat** Taylor Dam habitat for Australian coot, Pukeko, New Zealand scaup, grey teal, kingfisher, marsh crake, Australasian shoveler, black swan, paradise shelduck and waterfowl. **Invertebrate Habitat** Kōura habitat. **Riparian Habitat** Intact indigenous forest in upper Branch River. **Recreation** Swimming, walking, cycling, fishing, Taylor Dam, gamebird hunting.	AE, FS, F, CR
45	Timms	**Fish Habitat** Dwarf galaxias, upland bully and longfin eel habitat. Brown trout spawning. **Riparian Habitat** Intact indigenous forest in upper catchment. **Recreation** Tramping.	AE, FS
46	Top Valley	**Fish Habitat** Dwarf galaxias, upland bully, redfin bully and longfin eel habitat. Brown trout spawning. **Bird Habitat** Grey duck and waterfowl. **Riparian Habitat** Intact indigenous forest in upper catchment. Top Valley Wildlife Management Reserve. **Recreation** Gamebird hunting and tramping. **Natural Character** High.	AE, FS

No.	Water Resource Unit	Values	Water Quality Classifications
47	Tuamarina	**Fish Habitat** Īnanga, banded kokopu, koaro, common bully, upland bully, redfin bully, longfin eel and shortfin eel habitat. Brown trout spawning. **Bird Habitat** Pukeko, grey teal, kingfisher, Australasian shoveler, grey duck, Australasian bittern and waterfowl. **Invertebrate Habitat** Koura and freshwater mussel habitat. **Riparian Habitat** Riparian Habitat - Wetland vegetation. *Urtica linearifolia* habitat. **Recreation** Gamebird hunting.	AE, FS
48	Waihopai - Lower	**Fish Habitat** Īnanga, common bully, upland bully, torrentfish, lamprey, longfin eel and shortfin eel habitat. Brown trout habitat. **Bird Habitat** Black-fronted tern, banded dotterel and braided river bird habitat. **Recreation** Swimming, canoeing/kayaking, gamebird hunting and fishing.	AE, FS, F, CR
49	Waihopai - Upper	**Fish Habitat** Northern flathead galaxias, koaro, dwarf galaxias, upland bully and longfin eel habitat. Brown trout spawning. **Riparian Habitat** Small areas of intact indigenous vegetation. Weeping broom in riparian margins. **Recreation** Fishing and gamebird hunting.	AE, FS, F, CR
50	Waikakaho	**Fish Habitat** Inanga, black flounder, common bully, upland bully, lamprey, shortfin eel and longfin eel habitat. Brown trout spawning. **Riparian Habitat** Intact indigenous forest in upper catchment.	AE, FS

No.	Water Resource Unit	Values	Water Quality Classifications
51	Wairau - Upper	**Fish Habitat** Dwarf galaxias, koaro, northern flathead galaxias, alpine galaxias, upland bully, lamprey, longfin eel and shortfin eel habitat. Brown trout, rainbow trout and salmon habitat. Brown trout and salmon spawning. **Bird Habitat** Black fronted tern, fernbird, pied stilt, oyster catcher, banded dotterel, grey duck and paradise shelduck habitat. **Riparian Habitat** Intact indigenous forest in upper catchment and tributaries. Riparian wetlands. **Recreation** Kayaking, tramping, nationally significant trout fishery, and gamebird hunting. **Natural Character** Very high (source to Bull Paddock Stream).	AE, FS, F
52	Wairau Lagoon	**Fish Habitat** Īnanga, yelloweye mullet, shortfin eel and longfin eel habitat. **Bird Habitat** Terns, shags, banded dotterel, royal spoonbill, and migrant waders. Most diverse number of bird species in Marlborough. Nationally significant area. **Riparian Habitat** Wetland ecosystems. **Recreation** Gamebird hunting. Kayaking, kite surfing, fishing, whitebaiting and walking. **Cultural**	AE, FS, F, C
53	Wairau Plain Tributaries Complex	**Fish Habitat** Īnanga, black flounder, common bully, upland bully, longfin eel and shortfin eel habitat. Brown trout habitat. **Invertebrate Habitat** Kōura and freshwater mussel habitat.	AE, FS, F

No.	Water Resource Unit	Values	Water Quality Classifications
54	Wairau River Bed	**Fish Habitat** Īnanga, dwarf galaxias, black flounder, torrentfish, yelloweye mullet, giant bully, common bully, bluegill bully, upland bully, redfin bully, shortfin and longfin eel. Brown trout, rainbow trout and salmon habitat. Brown trout spawning. **Invertebrate Habitat** Kōura and freshwater mussel habitat. **Bird Habitat** Black fronted tern, black-billed gull, pied stilt, oyster catcher, banded dotterel, paradise shelduck, royal spoonbill, kotuku and wildfowl habitat. **Riparian Habitat** Riverside wetlands. **Recreation** Kayaking, rafting, whitebaiting, rowing, swimming, jet boating, water skiing, fishing and gamebird hunting.	AE, FS, F, CR
55	Wye	**Fish Habitat** Dwarf galaxias, koaro, upland bully, shortfin eel and longfin eel habitat. Brown trout habitat. **Riparian Habitat** Intact indigenous forest in upper catchment. **Natural Character** High.	AE, FS
56	Small Coastal Complex	**Fish Habitat** Banded kokopu, giant kokopu, koaro, īnanga, dwarf galaxias, common bully, bluegill bully, redfin bully, lamprey, longfin eel and shortfin eel habitat.	AE, FS
57	Small Sounds Streams	**Fish Habitat** Banded kokopu, giant kokopu, koaro, īnanga, shortjaw kokopu, dwarf galaxias, common bully, bluegill bully, redfin bully, giant bully, upland bully, torrentfish, common smelt, lamprey, longfin eel and shortfin eel habitat. **Bird Habitat** Weka habitat in riparian margins. **Riparian Habitat** Indigenous riparian vegetation. **Recreation** Children playing.	AE, FS

No.	Water Resource Unit	Values	Water Quality Classifications
58	Waima	**Fish Habitat** Īnanga, black flounder and longfin eel habitat. **Bird Habitat** Blue Duck habitat. Braided river birds. Coastal lagoon. **Recreation** Walking access to Sawcut Gorge. Gamebird hunting. **Natural Character** High.	AE, FS, A
59	Waitohi	**Fish Habitat** Banded kokopu, shortjaw kokopu, bluegill bully, redfin bully and longfin eel habitat. Brown trout habitat. **Riparian Habitat** Intact indigenous forest in upper catchment. **Recreation** Walking **Natural Character** Very high.	AE, FS, WS
60	Wakamarina	**Fish Habitat** Īnanga, koaro, shortjaw kokopu, dwarf galaxias, common bully, redfin bully, upland bully, bluegill bully, torrentfish, lamprey, shortfin eel and longfin eel habitat. Brown trout spawning. **Riparian Habitat** Intact indigenous forest in upper catchment. **Recreation** Swimming, kayaking, fishing and gold mining. **Natural Character** Very high (upper catchment).	AE, FS, CR

Other Water Resources	Values	Water Quality Classifications
All Coastal Water	Food gathering	SG
Benmorven Freshwater Management Unit*	**Water Supply** Individual domestic supplies.	WS
Brancott Freshwater Management Unit*	**Water Supply** Individual domestic supplies.	WS
Omaka Aquifer Freshwater	**Water Supply**	WS

Other Water Resources	Values	Water Quality Classifications
Management Unit*	Individual domestic supplies.	
Omaka River Freshwater Management Unit*	**Water Supply** Woodbourne residential supply. Individual domestic supplies.	WS
Rarangi Shallow Freshwater Management Unit*	**Water Supply** Individual domestic supplies.	WS
Riverlands Freshwater Management Unit*	**Water Supply** Riverlands municipal supply. Individual domestic supplies.	WS
Southern Springs Freshwater Management Unit*	**Water Supply** Individual domestic supplies.	WS
Wairau Aquifer Freshwater Management Unit*	**Water Supply** Blenheim and Renwick municipal supplies. Individual domestic supplies.	WS

* As mapped on Freshwater Management Unit Map 1.

Schedule 2 – Water Quality Classification Standards

<table>
<tr><th>Standard/Parameter</th><th>Interpretation of Standard/Parameter</th><th>Classification</th></tr>
<tr><td>Aquatic Life</td><td>pH
- The pH range must be from 6.5 to 8.5.
Particulate Organic Material (POM)
- The daily average concentration of POM must not exceed 4mg/l.
Toxicants
- Must not exceed the limits (μg/l^{-1}) in the following list:
<table>
<tr><td>Aluminium (pH>6.5)</td><td>55.00</td><td>Mercury (inorganic)</td><td>0.60</td></tr>
<tr><td>Ammonia-N (at pH = 8.0, temperature = 20°C)</td><td>0.05</td><td>Nickel</td><td>11.00</td></tr>
<tr><td>Arsenic (As III)</td><td>24.00</td><td>Nitrate (NO_3N)</td><td>2.40</td></tr>
<tr><td>Arsenic (As V)</td><td>13.00</td><td>Selenium (Total)</td><td>11.00</td></tr>
<tr><td>Boron</td><td>370.00</td><td>Silver</td><td>0.05</td></tr>
<tr><td>Cadmium</td><td>0.20</td><td>Zinc</td><td>8.00</td></tr>
<tr><td>Chromium (CrVI)</td><td>1.00</td><td>Chlorine</td><td>3.00</td></tr>
<tr><td>Copper</td><td>1.40</td><td>Cyanide</td><td>7.00</td></tr>
<tr><td>Lead</td><td>3.40</td><td>Hydrogen sulfide</td><td>1.00</td></tr>
<tr><td>Manganese</td><td>1900.00</td><td></td><td></td></tr>
</table></td><td>AE, FS</td></tr>
<tr><td>Biological Growths</td><td>- Bacterial and/or fungal slime growths must not be visible to the naked eye as obvious plumose growths or mats.
- The daily average carbonaceous BOD_5 due to dissolved organic compounds (i.e. those passing a GF/C filter) must not exceed 2mg/l.
- Dissolved reactive phosphorus (DRP) must be <0.015mg/l when rivers are at < median flow.
- Dissolved inorganic nitrogen (DIN) must be <0.444mg/l when rivers are at < median flow.</td><td>AE, FS</td></tr>
<tr><td>Temperature</td><td>- The daily maximum temperature must be ≤ 21°C, subject to natural inputs.
- The natural temperature of the water must not be changed by more than 3°C.</td><td>AE, FS, F</td></tr>
<tr><td>Turbidity</td><td>- Turbidity must be no greater than 5.6 Nephelometric Turbidity Units.</td><td>AE, FS, CR</td></tr>
</table>

Standard/Parameter	Interpretation of Standard/Parameter	Classification
Colour or visual clarity	- Hue must not be changed by more than 10 points on the Munsell scale. - The natural clarity must not be conspicuously changed due to sediment or sediment laden discharge originating from the site of a land disturbance operation. - The change in reflectance must be <50%. - Measurements are to be made immediately upstream of the discharge and below the discharge after reasonable mixing.	AE, FS
Dissolved Oxygen (DO)	- The daily minimum must be ≥0.75mg/l.	AE, FS, F
Deposited Fine Sediment (DFS) – Stoney Bottom Streams	- The DFS cover must be <20%.	AE, FS
Conspicuous oil or grease films, scums or foams, or floatable or suspended materials	- Conspicuous oil or grease films, scums or foams, or floatable or suspended materials must not be produced.	AE, FS, F
Objectionable odour	- Objectionable odour must not be emitted.	AE, FS, F
Suitability for consumption by farm animals	- Water must not be rendered unsuitable for consumption by farm animals.	AE, FS, F
Suitability of fish for human consumption	- Fish must not be rendered unsuitable for human consumption by the presence of contaminants.	F
Periphyton cover (filamentous algae >20mm long)	- Cover must be <30% when river flow is < median.	F, CR
Macroinvertebrate Community Index (MCI) – Stoney Bottom Streams	- Must be >100 when river flow is < median.	F
Escherichia coli (*E. coli*)	- Between 1 November and 30 April of the following year mean *E. coli* levels must be <126/100mL when rivers are at < median flow. - At all other times mean *E. coli* levels must be <260/100mL when rivers are at < median flow. - Between 1 November and 30 April of the following year maximum *E. coli* levels must be <260/100mL when rivers are at < median flow. - Between 1 November and 30 April of the following year maximum *E. coli* levels must be <260/100mL when rivers are at < median flow.	CR

<table>
<tr><th>Standard/Parameter</th><th>Interpretation of Standard/Parameter</th><th>Classification</th></tr>
<tr><td>Cyanobacteria (mat >3mm thick)</td><td>- Between 1 November and 30 April of the following year the seasonal maximum mat must be <20% when river flow is < median.
- At all other times the must be <50% when river flow is < median.</td><td>CR</td></tr>
<tr><td>Suitability for human consumption</td><td>- Water must not be tainted or contaminated so as to make it unpalatable or unsuitable for human consumption after treatment.
- Water treated by coagulation/filtration/ disinfection shall be able to comply with the Drinking-Water Standards for New Zealand 2005 (revised 2008).</td><td>WS</td></tr>
<tr><td>Suitability for treatment</td><td>- Water must not be rendered unsuitable for treatment (equivalent to coagulation, filtration, and disinfection) by presence of contaminants.
- The maximum turbidity limit, except that produced naturally under flood conditions, must not exceed 20 Nephelometric Turbidity Units (NTU) when rivers are at < median flow.</td><td>WS</td></tr>
<tr><td>pH</td><td>- The pH range must be from 6.0 to 9.0.</td><td>WS</td></tr>
<tr><td>Biological Growths</td><td>- The daily average carbonaceous BOD_5 due to dissolved organic compounds (i.e. those passing a GF/C filter) must not exceed 2mg/l.
- Phytoplankton chlorophyll-a must be <0.02mg/l when rivers are at < median flow.</td><td>WS</td></tr>
<tr><td>Toxicants</td><td>Toxicants
- Must not exceed the limits ($\mu g/l^{-1}$) in the following list:
<table>
<tr><td>Aluminium (pH>6.5)</td><td>27.00</td><td>Mercury (inorganic)</td><td>0.06</td></tr>
<tr><td>Arsenic (As III)</td><td>1.00</td><td>Nickel</td><td>8.00</td></tr>
<tr><td>Arsenic (As V)</td><td>0.80</td><td>Selenium (Total)</td><td>5.00</td></tr>
<tr><td>Boron</td><td>90.00</td><td>Silver</td><td>0.02</td></tr>
<tr><td>Cadmium</td><td>0.06</td><td>Zinc</td><td>2.40</td></tr>
<tr><td>Chromium (CrVI)</td><td>0.01</td><td>Chlorine</td><td>0.40</td></tr>
<tr><td>Copper</td><td>1.00</td><td>Cyanide</td><td>4.00</td></tr>
<tr><td>Lead</td><td>1.00</td><td>Hydrogen sulfide</td><td>0.50</td></tr>
<tr><td>Manganese</td><td>1200.00</td><td></td><td></td></tr>
</table></td><td>NS</td></tr>
<tr><td>Colour or visual clarity</td><td>Measurements are to be made immediately upstream of the discharge and below the discharge after reasonable mixing.
- Hue must not be changed by more than 5 points on the Munsell scale.
- Turbidity must be no greater than 1.5 Nephelometric Turbidity Units.</td><td>A</td></tr>
<tr><td>Temperature</td><td>- The natural temperature of the water must not be changed by more than 3°C.</td><td>SG</td></tr>
</table>

Standard/Parameter	Interpretation of Standard/Parameter	Classification
Dissolved Oxygen	- Must exceed 80% of saturation or 6mg/l, whichever is greater.	SG
Suitability of fish for human consumption	- Must not be rendered unsuitable by the presence of contaminants. - Median faecal coliform content of samples taken over a shellfish gathering season must not exceed a Most Probable Number (MPN) of 14 per 100ml, and not more than 10% of samples must exceed an MPN of 43 per 100ml (or Colony Forming Units per 100ml).	SG

Appendix 6

Environmental Flows and Levels

Schedule 1 – Quantity Allocations for Water Takes

Freshwater Management Unit (FMU) *	**Class**	**Allocation** ***Cubic metres per day***	**Allocation** ***Cubic metres per year***
Acheron	n/a	Zero	n/a
Are Are	A	43,200	n/a
Awatere	Municipal Supply A B C	8,000 83,250 219,790 224,640	n/a
Kauauroa Bay Significant Wetland W1026	n/a	Zero	n/a
Benmorven	A C	n/a 8,640	209,000 n/a
Boundary	A	7,344	n/a
Branch	n/a	Zero	n/a
Brancott	A	n/a	282,000
Chaytor Significant Wetlands W127, W128 and W129	n/a	Zero	n/a
Flaxbourne – Upper	A B C1 C2 C3	195 500 Zero 4,150 86,400	n/a
Flaxbourne – Central	A B C1	495 1,000 5,850	n/a
Flaxbourne – Lower	A B C1	1,850 30 7,110	n/a
Gibsons Creek (Waihopai intake to the Omaka River confluence)	n/a	Zero	n/a
Goulter River, Goulter Significant Wetland W35 and Lake Chalice	n/a	Zero	n/a

Freshwater Management Unit (FMU) *	**Class**	**Allocation** ***Cubic metres per day***	**Allocation** ***Cubic metres per year***
Kaituna	Municipal Supply A B	2,000 8,640 8,640	n/a
Lake Alexander	n/a	Zero	n/a
Lake McRae	n/a	Zero	n/a
Lower Waihopai Excluding Gibsons Creek (Waihopai intake to the Omaka River confluence)	n/a	n/a	160,000
Needles/Tachalls – 1 October to 30 April of the following year	n/a	1,560	n/a
Needles/Tachalls – 1 May to 30 September in the same year	n/a	4,000	n/a
Omaka Aquifer	A	n/a	290,000
Omaka River	A B	14,688 3,456	n/a
Omaka River – 1 May to 31 October of the same year (Excluding Sam's Creek)	C	8,640	n/a
Ōpaoa (above O'Dwyers Road)	n/a	Zero	n/a
Ōpaoa (below O'Dwyers Road)	n/a	25,000	n/a
Opouri	A B	10,195 17,280	n/a
Para Significant Wetland W108	n/a	Zero	n/a
Pelorus (Lower) - Pelorus River and tributaries downstream of confluence with the Scott Creek (excluding Rai)	A B	45,000 45,000	n/a
Pelorus (Upper) - Pelorus River upstream of confluence with the Scott Creek	n/a	Zero	n/a
Pipitea Significant Wetland W55	n/a	Zero	n/a
Possum Swamp Stream Significant Wetland W116	n/a	Zero	n/a
Rai (total including Opouri, Tunakino and Ronga FMUs)	A B	29,635 60,480	n/a
Rarangi Shallow	n/a	750	n/a
Riverlands Excluding Ōpaoa (below Taylor confluence) and Wairau Lagoons	n/a	n/a	4,234,000
Ronga	A B	4,665 8,640	n/a

Freshwater Management Unit (FMU) *	**Class**	**Allocation** ***Cubic metres per day***	**Allocation** ***Cubic metres per year***
Roses Overflow	n/a	2,000	n/a
Sam's Creek – 1 May to 31 October of the same year	C	172,800	n/a
Southern Springs	n/a	n/a	6,673,800
Taylor Excluding Taylor River (below Burleigh Bridge)	A C	2,160 8,640	n/a n/a
Taylor River (below Burleigh Bridge)	n/a	Zero	n/a
Tunakino	A B	4,752 8,640	n/a
Tuamarina Excluding Para Significant Wetland W108	Municipal Supply A B1 B2	5,000 3,888 5,184 5,184	n/a
Waihopai (including Gibsons Creek above SVIS Wairau diversion channel confluence) Excluding Lake Alexander	A B C	34,560 97,632 241,920	n/a
Wairau Aquifer Excluding Gibsons Creek (Waihopai intake to the Omaka River confluence), Ōpaoa River (including Roses Overflow and Ōpaoa Loop), Wairau Lagoons and the Pipitea Significant Wetland W55 and Chaytor Significant Wetlands W127, W128 and W129.	n/a	n/a	73,006,000
Wairau Lagoons	n/a	Zero	n/a
Wairau River downstream of the Hamilton River confluence Excluding Goulter River, Goulter Significant Wetland W35, Lake Chalice and Possum Swamp Stream Significant Wetland W116.	Municipal Supply A B C	480 650,000 650,000 1,728,000	n/a
Wairau River upstream of the Hamilton River confluence Including Tarndale Lakes and Upper Wairau Significant Wetland W580	n/a	Zero	n/a

* A FMU is identified either:

(a) on Freshwater Management Unit Maps 1 or 2; or

(b) described in Schedule 1; or

(c) identified on Freshwater Management Unit Maps 1 or 2, and further described in Schedule 1; or

(d) is not specifically defined.

1.1 An FMU that is also a Significant Wetland is identified in the zone maps.

1.2 The allocation limit for a FMU not listed in Schedule 1 is calculated as follows:

(a) for a river with a mean flow of less than or equal to 5m³/s, the allocation limit is 30% of the mean annual 7 day low flow;

(b) for a river with a mean flow greater than 5m³/s, the allocation limit is 50% of the mean annual 7 day low flow.

Schedule 2 – Quantity Allocations for Consumptive Diversions

Freshwater Management Unit (FMU)*	**Class**	**Allocation** ***Cubic metres per day***	**Allocation** ***Cubic metres per year***
Branch	n/a	2,635,200	n/a
Gibsons Creek Rewatering Diversion (MDC)	n/a	34,560	n/a
Wairau River Environmental Flow Diversion (MDC)	n/a	17,280	n/a

* A FMU is identified either:

(a) on Freshwater Management Unit Maps 1 or 2; or

(b) described in Schedule 2; or

(c) identified on Freshwater Management Unit Maps 1 or 2, and further described in Schedule 2; or

(d) is not specifically defined.

Schedule 3 – Minimum Flows and Levels for Water Takes

Freshwater Management Unit (FMU) *	Class	Minimum Flow or Level (Management Purpose)	Monitoring Site or Method **	Management Flow or Level *** (Management Method)
Awatere	A	Minimum of 2.000m^3/s at outlet to sea	Awapiri	Rationed below 2.300m^3/s Fully restricted below 1.450m^3/s
	B			Rationed below 5.600m^3/s Fully restricted below 2.300m^3/s
	C			Rationed below 9.500m^3/s Fully restricted below 5.600m^3/s
Are Are	A	Minimum of 0.080m^3/s at Kaituna-Tuamarina Track Bridge	Kaituna-Tuamarina Track Bridge	Fully restricted below 0.080m^3/s
Benmorven	A	Minimum level 20mamsl at P28w/2022	P28w/2022	Fully restricted below 20mamsl
	C		Taylor at Borough Weir	Fully restricted below 2.000m^3/s
Boundary	A	Minimum of 0.180m^3/s at Ormond	Ormond	Fully restricted below 0.180m^3/s
Brancott	A	Minimum level 36.5m amsl at P28w/1323	P28w/1323	Fully restricted below 36.5mamsl
Flaxbourne – Upper, Central and Lower	A	Minimum of 0.010m^3/s at SH1 bridge	Corrie Downs	Fully restricted below 0.025m^3/s
	B			Fully restricted below 0.045m^3/s
	C1			Fully restricted below 0.250m^3/s
	C2			Fully restricted below 0.400m^3/s
	C3			Fully restricted below 0.600m^3/s
Kaituna	A	Minimum of 0.275m^3/s at Readers Road Bridge	Readers Road Bridge	Fully restricted below 0.275m^3/s
	B			Fully restricted below 0.400m^3/s
Needles Creek (including Tachalls)	n/a	Minimum level 22.8mamsl at Needles Creek	P29w/0169	Fully restricted when water level at or below 22.8mamsl
Omaka Aquifer	A	Minimum level 73mamsl at P28w/1873	P28w/1873	Fully restricted below 73mamsl
Omaka River	A	Minimum level 24.5mamsl at well 10231	Tyntesfield Gorge	Fully restricted below 0.067m^3/s
	B			Fully restricted below 0.400m^3/s
	C			Fully restricted below 1.200m^3/s
Ōpaoa (below O'Dwyers Road)	A	Minimum of 1.500m^3/s adjacent to Sec 1 SO 417530	Hutcheson Street	Fully restricted below 1.000m^3/s
Opouri	A	Minimum of 1.000m^3/s in Rai River at Falls	Rai River at Falls	Fully restricted below 1.000m^3/s
	B			Fully restricted below 1.250m^3/s

Freshwater Management Unit (FMU) *	Class	Minimum Flow or Level (Management Purpose)	Monitoring Site or Method **	Management Flow or Level *** (Management Method)
Pelorus including tributaries (excluding Rai)	A	Minimum of 3.75m^3/s at Fishermans Flat	Totara Flat	Rationed below 3.150m^3/s Fully restricted below 2.690m^3/s
	B			Rationed below 3.600m^3/s Fully restricted below 3.200m^3/s
Riverlands	n/a	Minimum level 1.25mamsl at 10346	Well 10346	Fully restricted below 1.25mamsl
Ronga	A	Minimum of 1.000m^3/s in Rai River at Falls	Rai River at Falls	Fully restricted below 1.000m^3/s
	B			Fully restricted below 1.250m^3/s
Rai (total including Opouri, Tunakino and Ronga)	A	Minimum of 1.000m^3/s in Rai River at Falls	Rai River at Falls	Fully restricted below 1.000m^3/s
	B			Fully restricted below 1.500m^3/s
Rarangi Shallow Aquifer North	n/a	Minimum level 1.20mamsl at P28w/4331 Minimum level 0.25mamsl at P28w/4349	P28w/4331 P28w/4349	Fully restricted below 1.20mamsl Fully restricted below 0.25mamsl
Rarangi Shallow Aquifer South	n/a	Minimum level 1.20mamsl at P28w/4331 Minimum level 0.25mamsl at P28w/3668 and/or P28w/3711	P28w/4331 P28w/3668 and/or P28w/3711	Fully restricted below 1.20mamsl Fully restricted below 0.25mamsl
Roses Overflow	n/a	Minimum of 0.100m^3/s at Wairau confluence	Hutcheson Street	Fully restricted below 1.000m^3/s
Sam's Creek	C	Minimum level 24.5mamsl at well 10231	Tyntesfield Gorge	Fully restricted below 1.200m^3/s
Southern Springs	n/a	Minimum of 0.010m^3/s at Battys Road	Batty's Road Bridge	Fully restricted below 0.010mamsl
Spring Creek	n/a	Minimum of 2.6m^3/s at Motor Camp	Motor Camp	Fully restricted below 2.600m^3/s
Taylor River (below Doctors Creek confluence)	A	Minimum of 1.000m^3/s at Hutcheson Street	Hutcheson Street	Minimum of 1.000m^3/s
Tuamarina	A	Minimum of 0.100m^3/s at Para Road	Para Road Bridge	Fully restricted below 0.100m^3/s
	B1			Fully restricted below 0.120m^3/s
	B2			Fully restricted below 0.150m^3/s
Tunakino	A	Minimum of 1.000m^3/s in Rai River at Falls	Rai River at Falls	Fully restricted below 1.000m^3/s
	B			Fully restricted below 1.250m^3/s
Waihopai (including	A	Minimum of 1.000m^3/s at SH63; and	Craiglochart	Rationed below 1.900m^3/s Fully restricted below 1.500m^3/s

Freshwater Management Unit (FMU) *	Class	Minimum Flow or Level (Management Purpose)	Monitoring Site or Method **	Management Flow or Level *** (Management Method)
Gibsons Creek above Drop structure)		Minimum of 8.000m^3/s at Barnetts Bank	Barnetts Bank	Fully restricted below 8.000m^3/s
	B	Minimum of 1.000m^3/s at SH63; and Minimum of 8.000m^3/s at Barnetts Bank	Craiglochart Barnetts Bank	Rationed below 3.600m^3/s Fully restricted below 1.900m^3/s Fully restricted below 8.000m^3/s
	C	Minimum of 1.000m^3/s at SH63; and Minimum of 8.000m^3/s at Barnetts Bank	Craiglochart Barnetts Bank	Rationed below 7.800m^3/s Fully restricted below 3.600m^3/s Fully restricted below 8.000m^3/s
Wairau River (below The Narrows)	A	Minimum of 8.000m^3/s at Barnetts Bank	Barnetts Bank	Fully restricted below 8.000m^3/s
	B			Fully restricted below 15.000m^3/s
	C			Fully restricted below 30.000m^3/s
Wairau River (above The Narrows)	A	Minimum of 8.000m^3/s at Barnetts Bank	Barnetts Bank Dip Flat	Fully restricted below 8.000m^3/s Fully restricted below 7.320m^3/s
	B		Barnetts Bank	Fully restricted below 15.000m^3/s
	C		Barnetts Bank	Fully restricted below 30.000m^3/s
Wairau Aquifer Urban Springs	n/a	Minimum level 6.5mamsl at P28w/3954	P28w/3954	Fully restricted below 6.5mamsl
Wairau Aquifer Central Springs	n/a	Minimum level 6.1mamsl at P28w/4404	P28w/4404	Fully restricted below 6.1mamsl
Wairau Aquifer North Springs	n/a	Minimum level 11.8mamsl at P28w/3009	P28w/3009	Fully restricted below 11.8mamsl
Wairau Aquifer South Coastal	n/a	Minimum level 1.25mamsl at Well 10346	Well 10346	Fully restricted below 1.25mamsl
Wairau Aquifer Central Coastal	n/a	Minimum level 1.25mamsl at P28w/1733	P28w/1733	Fully restricted below 1.25mamsl
Wairau Aquifer North Coastal	n/a	Minimum level 1.25mamsl at P28w/3667	P28w/3667	Fully restricted below 1.25mamsl

* A FMU is identified either:

(a) on Freshwater Management Unit Maps 1, 2, 3 or 4; or

(b) described in Schedule 3; or

(c) identified on Freshwater Management Unit Maps 1, 2, 3 or 4, and further described in Schedule 3; or

(d) is not specifically defined.

** Monitoring sites are mapped on Freshwater Management Unit Maps 1, 2, 3 or 4.

*** Levels and elevations are expressed in metres above Mean Sea Level (mamsl) in terms of the Marlborough District Council Rivers and Drainage datum.

3.1 The minimum flow for a FMU not listed in Schedule 3 is calculated as follows:

(a) for a river with a mean flow of less than or equal to 5m³/s, the minimum flow is 90% of the mean annual 7 day low flow.

(b) for a river with a mean flow greater than 5m³/s, the minimum flow is 80% of the mean annual 7 day low flow.

Schedule 4 – Minimum Flows and Levels for Water Diversions

River	**Minimum Flow or Level (Management Purpose)**	**Monitoring Site or Method ***	**Management Flow or Level ** (Management Method)**
Branch	0.700m^3/s at State Highway 63 Road Bridge	Branch at Weir	Fully restricted below 1.200m^3/s
Gibsons Creek (Waihopai intake to Wairau intake channel)	Minimum of 0.200m^3/s at the Gibsons Creek Control Gate	Gibsons Creek Control Gate	Monitoring.

* Monitoring sites are mapped on Freshwater Management Unit Maps 1, 2, 3 or 4, or described in Schedule 4.

Schedule 5 – Conductivity Levels for Water Takes

FMU *	**Conductivity Level Millisiemens per metre**	**Restriction ****	**Monitoring Site *****
Rarangi Shallow Aquifer South	Between 70-90mS/m > 90mS/m	Reduce actual take by 50% Reduce actual take by 100%	P29w/3668 and/or P29w/3711
Riverlands	Between 40-60mS/m > 60mS/m	Reduce actual take by 50% Reduce actual take by 100%	Well 10346
Wairau Aquifer Coastal South	Between 40-60mS/m > 60mS/m	Reduce actual take by 50% Reduce actual take by 100%	Well 10346
Wairau Aquifer Coastal Central	Between 40-60mS/m > 60mS/m	Reduce actual take by 50% Reduce actual take by 100%	MDC Monitoring well P29w/1733
Wairau Aquifer Coastal North	Between 70-90mS/m > 90mS/m	Reduce actual take by 50% Reduce actual take by 100%	MDC Monitoring well P29w/3667

* A FMU is identified on Freshwater Management Unit Maps 1, 2, 3 or 4.

** The reduction in actual take is based on the average daily take over the preceding seven days.

*** Monitoring sites are mapped on Freshwater Management Unit Maps 1, 2, 3 or 4.

Appendix 7

Scheme Plan and other subdivision requirements

Any application for subdivision consent must be accompanied by a Scheme Plan that contains the information set out in this Appendix.

Size

All plans should be on standard metric sheets.

Format

The Scheme Plan must be capable of being photocopied or printed in black and white, except for supplementary plans utilising aerial photography.

Scale

Every plan should be drawn at a scale to clearly illustrate the proposal. A minimum scale of 1:500 is preferred for urban subdivision proposals.

It is preferred that all Scheme Plans be orientated to north and show a north point and a NZTM (at centroid of largest parcel being created).

Information

The following particulars must be shown on the Scheme Plan:

1. Legal description.
2. Computer Freehold Register reference (noted 'Limited' where applicable).
3. Local authority districts and their boundaries where applicable.
4. The scale of the Scheme Plan and any other relevant diagrams.
5. Registered owner's name.
6. The area of each allotment (inclusive and exclusive of access) and the total area of all of the allotments combined.
7. Name of surveyor or registered survey firm.
8. Any covenants affecting the land.
9. Unique reference or identification number used by the applicant.
10. Zone boundaries, designations, roads and service lanes and the proposed status of all land to be vested.

11. A locality diagram to assist in identifying any rural property, and in other cases, where additional locational cues are necessary.

12. In the case of any subdivision which requires an amalgamation condition to be included in its approval, this must be shown on the Scheme Plan along with an indication which provision in Section 220(1)(b) of the RMA will apply to those circumstances. Full legal descriptions must be provided.

Site details to be provided

The following site details must be shown on, or with, the Scheme Plan:

1. The position of all proposed new boundaries.

2. Every allotment must be given a lot number and must show its area in metric units.

3. New roads should be shown as 'road to vest'. Proposals to have roads to be dedicated and transferred must be supported by sound reasons. New road names are not to be shown on any Scheme Plan unless it is a natural extension of a road already named or approval for the name has already been provided.

4. Service lanes and accessways must be shown simply as 'service lane to vest' or (pedestrian) 'accessway to vest' as the case may be. The nominal width of all roads, service lanes and accessways must be shown.

5. A status comment on the position of any existing and proposed road formation in relation to boundaries must be provided.

6. The proposed purpose of every new reserve to vest must be shown on the Scheme Plan, being one of the categories specified in Sections 17 to 23 of the Reserves Act 1977. In the case of a Government Purpose Reserve or Local Purpose Reserve, the specific purpose must be shown, e.g.; 'Local Purpose (Esplanade) Reserve'. All land below Mean High Water Springs and the beds of rivers and lakes required to vest in the Crown must be clearly identified.

7. Where known, easements existing or easements to be created must be shown on the Scheme Plan with the purpose nominated. Document numbers must be provided.

8. Adequate contour or height information to illustrate the existence on each allotment of a suitable building site (if required), drainage, waste disposal and access and to enable the gradients proposed for roads, rights of way and accessways to be assessed. For two or three allotment subdivisions, the Council may accept spot levels in terms of a recognised local datum.

9. Landscape works proposed on road reserves.

10. The proposed location and type of power and telephone services.

11. Details of any Limited Access Road.

Other relevant site details

The following details must be included on, or with, the Scheme Plan, where applicable:

1. Contours or spot heights, where possible in terms of a recognised local datum; if that is not practicable, then an assumed datum should be used.

2. The location of existing buildings or structures.

3. An activity description of existing buildings.

4. Vegetation covering the land, particularly any significant vegetation or notable trees.

5. The position of MHWS, and any rivers, lakes or wetlands.

6. Natural drainage and stormwater features, including flowpaths.

7. Existing drains, piped or open.

8. Areas subject to flooding or inundation, including by the sea.

9. Unstable areas, including geological fault lines.

10. Where necessary, a suitable building site.

11. Details of sewage disposal (including the position of any existing treatment unit or land application area).

12. Details of stormwater management, including any treatment.

13. Details of quantity and quality of the water supply.

14. Details of electricity/telecommunications reticulation.

15. Details of proposed access location (including distance from adjacent and opposite accesses and intersections) and design (including width, gradient, formation).

16. Areas, buildings, objects, sites or natural features of significant value identified in the Marlborough Environment Plan.

17. Any other physical feature of the land which is or may be relevant to the subdivision or approval conditions.

18. Any known site of spiritual or cultural significance to Marlborough's tangata whenua iwi.

19. Building platform shape factors and other circles required by Rule 24.3.1.2.

20. Existing Building Line Restrictions with document number.

21. Any site contamination from site inspections, owner's knowledge or from Council records.

22. Engineering drawings detailing the following earthworks proposals:

    (a) Original and final contours;

    (b) Areas of cut and fill;

    (c) Subsoil drainage;

    (d) Sediment control.

23. Details of the location of any high voltage transmission lines (110kV or greater).

Topographical Detail for Urban Subdivisions

Generally topographical detail need only be shown on that part of the land where new building sites (including access to the sites), and allotment boundaries are proposed or the degree of subdivision is intense (approaching minimum allotment sizes). It does not need to be shown over large allotments which are balance areas, unless it is necessary to be shown as the basis for possible future extensions to the subdivision or unless in specific cases the Council requests it.

Topographical Detail for Rural Subdivisions

The topographical detail shown on a rural Scheme Plan does not need to be as detailed as that required for an urban subdivision. Sufficient data of the same nature as that set out in "Other relevant site details" should be shown for the indicative building site and any proposed access. Topographical detail may also be relevant to the task of identifying proposed boundaries on the ground or establishing any necessary conditions of approval.

Aerial photographs, where available, may be used to supplement topographical data, provided they are of sufficient scale and clarity to be readily interpreted and must have the boundaries of the proposed subdivision clearly indicated thereon.

The circumstances of each case will determine the extent and the detail of topographical information which should be shown but the Council may ask for more information where it is necessary to assist the processing of any application.

Additional information

The following additional information must be supplied with the Scheme Plan:

1. Copies of Computer Register(s) no older than one month from the date of application.

2. Copies of all consent notices and any other relevant interests registered.

3. Where relevant, details of jointly owned access allotments and details of the proposed shared ownership.

Suitable Building Site

All applications to subdivide land are required to demonstrate that subdivision and subsequent activities are not likely to accelerate, worsen, or result in material damage to that land, other land or structure, by erosion, falling debris, subsidence, slippage or inundation from any source.

Where proposed allotments might reasonably be expected to accommodate a future dwelling or dwellings, and any land is likely to be subject to material damage by erosion, falling debris, subsidence, slippage or inundation, the application must demonstrate that each allotment has within it a suitable building site. Each such suitable building site must be shown on the Scheme Plan and the application must be supported by an appropriate professional report as follows:

Where land instability is likely, the application must be supported by a geotechnical report prepared by a suitably qualified Chartered Professional Engineer for the purpose of supplying opinions as to the stability of land. The Council provides the format for the preparation of such reports.

Where inundation is likely, the application must be supported by a catchment analysis prepared by a Chartered Professional Engineer experienced in flood hydraulics to demonstrate that each allotment has a flood-free building platform. For the purposes of the catchment analysis, a 1 in 50 year return period must be used.

Information on servicing

Water Supply

The developer must make provision for the supply of water adequate for reasonably expected domestic, stock, commercial or industrial consumption.

All urban subdivisions are required to be connected to the reticulated water supply system where connection is available. The provision of reticulated water supply is addressed by Rules 24.1.1 to 24.1.3.

Where the allotments are proposed to be supplied through other means, the developer must provide details of proposed water supply to serve all allotments, including balance land. Both the quantity and quality of the supply should be addressed. The provision of water supply in rural areas is also addressed by Rule 24.1.14.

Sewerage

The developer must provide means for the satisfactory disposal of sewage wastes from all allotments and from all buildings where such wastes are to be generated.

Unless unreasonable in the circumstances, the sewerage system must be designed to serve the expected load for any further subdivision or development from the upstream catchment area.

All urban subdivisions are required to be connected to the reticulated services where they exist. The provision of reticulated sewerage is addressed by Rules 24.1.1 to 24.1.3.

Where the allotments are proposed to be serviced by on-site methods, the allotments are to be subject to investigation to confirm that on-site management is the best practicable option, and that sewage will be effectively treated and contained on-site. The investigation may require an on-site assessment of the site conditions and constraints, particularly soil properties. The results of any on-site assessment must be documented in a Site and Soil Evaluation Report prepared by a professional who has established credentials with the Council.

Any subdivision of land in the Coastal Living Zone or any subdivision of land below controlled activity allotment sizes in the Coastal Environment Zone must involve an on-site assessment of the site conditions and constraints.

The sizing of the land application area must be based on the loading from at least a four bedroom dwelling (occupied full time).

Parts of the proposed allotment appropriate to be used as land application areas should be shown on the Scheme Plan.

Stormwater Drainage

The developer must provide a satisfactory system for the collection, treatment and disposal of stormwater from all allotments, roads, accessways and private roads. The system must provide for the collection and control of all stormwater within the land being subdivided together with the potential drainage for the catchment upstream of the subdivision.

All urban subdivisions are required to be connected to the reticulated services where they exist. The provision of reticulated stormwater is addressed by Rules 24.1.1 to 24.1.3.

Where the allotments are proposed to be serviced by either new stormwater infrastructure or through on-site methods, the developer must demonstrate that the method of management will effectively service the proposed subdivision.

Information on Site Management

A Site Management Strategy must be provided with the Scheme Plan in any of the following circumstances:

1. Where a road is to be formed.

2. Where a right of way is to be formed or upgraded that serves other properties or serves more properties than provided for by a rule in the Marlborough Environment Plan.

3. Where trenching associated with the installation of services will involve dewatering.

4. Where extensive excavation/filling is to occur as part of the development of the subdivision.

The Site Management Strategy must address the following matters, in order:

1. A commentary on the proposed construction management infrastructure and how and by whom the project's impact will be effectively supervised and controlled to manage and monitor potential detrimental effect.

2. A detailed commentary on proposed site works.

3. A time line programme showing key target dates and highlighting the occurrence of activities with particular potential threat to the environment.

4. Methods for managing nuisance effects of construction including construction noise, the generation of dust and the deposition of mud or construction materials on roads.

5. Methods for managing the potential for stormwater to become contaminated during construction of the subdivision (including where the subdivision construction is staged).

6. Where necessary, methods for managing the potential adverse effects of dewatering.

7. A time table for periodic review of progress and changes to the anticipated outcome to ascertain whether there is a need for consequent changes to the supervision/monitoring regime.

8. Detail on the scale of water supply, discharge and waste disposal needs (solid and liquid) for the construction of the subdivision.

9. Identification of site access points and projected frequency of use.

The size and scope of the Site Management Strategy will directly reflect the size of the project and its potential impact.

Appendix 8

Discharge to Air

Schedule 1 – Emission Requirements Small-scale Solid Fuel Burning Appliances.

Small-scale solid fuel burning appliances must:

(a) Emit no more than 1.5 grams of total suspended particulate per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999 or the functional equivalent for non-batch fed appliances. Where the nominated test fuel is wood then the test must be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999; and

(b) Have a thermal efficiency, for space heating only, as described in AS/NZS 4013:1999, of 65% or greater; and

(c) Not be modified in any way so as to alter the specifications of the heating device from those tested and stated in a) and b); and

(d) Be maintained in good operational order and operated in accordance with the manufacturer's instructions (so long as those do not mandate operation that would lead to output that does not comply with a) or b), and be operated with the door shut in the case of enclosed appliances; and

(e) Be capable of being operated on a high, medium and low burn rate.

Schedule 2 – Stack Requirements Small-scale Solid Fuel Burning Appliances

The discharge into air from any device installed after 9 June 2016 must be to the atmosphere via an emission stack which in all cases extends vertically not less than 4.6m above the floor protector under the appliance, and:

(a) where the stack is within 3m horizontally, or closer, to the highest point of the roof of the building, the stack must protrude at least 600mm above the high point of the roof; or

(b) where the stack is further than 3m horizontally from the highest point of the roof of the building, the stack must protrude at least 1000mm above the point of roof penetration; and

(c) the stack must be sufficiently high so that no building (including the building into which the appliance is being installed), substantial structure or any land, lies in or above a horizontal plane with a radius of 3m drawn around the top of the stack; and

(d) the discharge must be directed vertically into air (although cowls or weather protectors are permitted).

Schedule 3 – Stack Requirements: Small-scale Fuel Burning Appliances (Gas, Oil and Other Liquid Fuels)

The discharge into air from any device installed after 9 June 2016 (including any pellet burner that complies with AQ2A (AQr.26)) must be via an emission stack to the outside atmosphere such that the discharge point at the end of the stack is above the roof of the building, and:

(a) be at least 500mm from the nearest part of the roof; and

(b) in the case of a trafficable roof designed for personal or public use, be at least 2m above roof level and 500mm above any surrounding parapet; and

(c) in the case of a chimney, be at least 200mm above the top of the chimney, be at least 1m horizontally from a neighbouring structure, or if less than 1m from that structure, at least 500mm above it; and

(d) be at least 1.5m for any opening into a buildings; and

(e) be at least 200mm from another stack.

Schedule 4 – Stack Requirements: Stationary Internal Combustion Appliances

The discharge into air from any stationary internal combustion appliance must, after the date of notification of this plan, be via an emission stack where:

(a) the discharge point it at least 3m above ground level; or

(b) the discharge point is 2.5m higher than the apex of any building, tree, slope or other structure within a radius of 2.5 times the stack height (whichever discharge point a) or b) is the higher; and

(c) the exhaust gases are directed vertically into air and the exhaust gases are not impeded by any obstruction that would lower the velocity of the exhaust gases.

Schedule 5 – Chimney Height Schedules for External Combustion

Table 1: Chimney Height Schedules for Diesel, Coal, Wood and Pellet Boilers

Diesel		
PM_{10} Emission Rate g/hr	**Indicative Heat Output**	**Chimney Height** Metres
1	40kW	6.0
3	100kW	7.0
6	200kW	7.0
9	300kW	7.0
12	400kW	7.0
15	500kW	7.0
30	1MW	8.0
45	2MW	8.0
90	3MW	9.0
121	4MW	9.0
151	5MW	9.0
181	6MW	10.0
211	7MW	10.0
241	8MW	10.0
271	9MW	10.0
302	10MW	10.0
Coal		
PM_{10} Emission Rate g/hr	**Indicative Heat Output**	**Chimney Height** Metres
14	40kW	8.0
36	100kW	10.5
72	200kW	13.0
107	300kW	14.5
175	1MW	20.0
Wood		
PM_{10} Emission Rate g/hr	**Indicative Heat Output**	**Chimney Height** Metres
20	40kW	10.0
51	100kW	>12.0*
100	200kW	>12.0
152	300kW	>12.0
203	400kW	>12.0
253	500kW	>12.0

Pellet (Conversions)		
PM_{10} Emission Rate g/hr	**Indicative Heat Output**	**Chimney Height** Metres
8	40kW	7.0
20	100kW	9.5
40	200kW	10.5
60	300kW	11.5
80	400kW	12.0
100	500kW	13.0
152	700kW	14.0
253	1MW	16.0
Pellet (Custom)		
PM_{10} Emission Rate g/hr	**Indicative Heat Output**	**Chimney Height** Metres
8	100kW	7.0
15	200kW	9.5
23	300kW	9.5
30	400kW	10.5
38	500kW	10.5
63	700kW	11.5
75	1.0MW	12.0
98	1.3MW	13.0

* chimney height requirement to be assessed through resource consent process.

Table 2: Chimney Height Schedules for Light Fuel Oil (LFO), Heavy Fuel Oil (HFO) and LPG

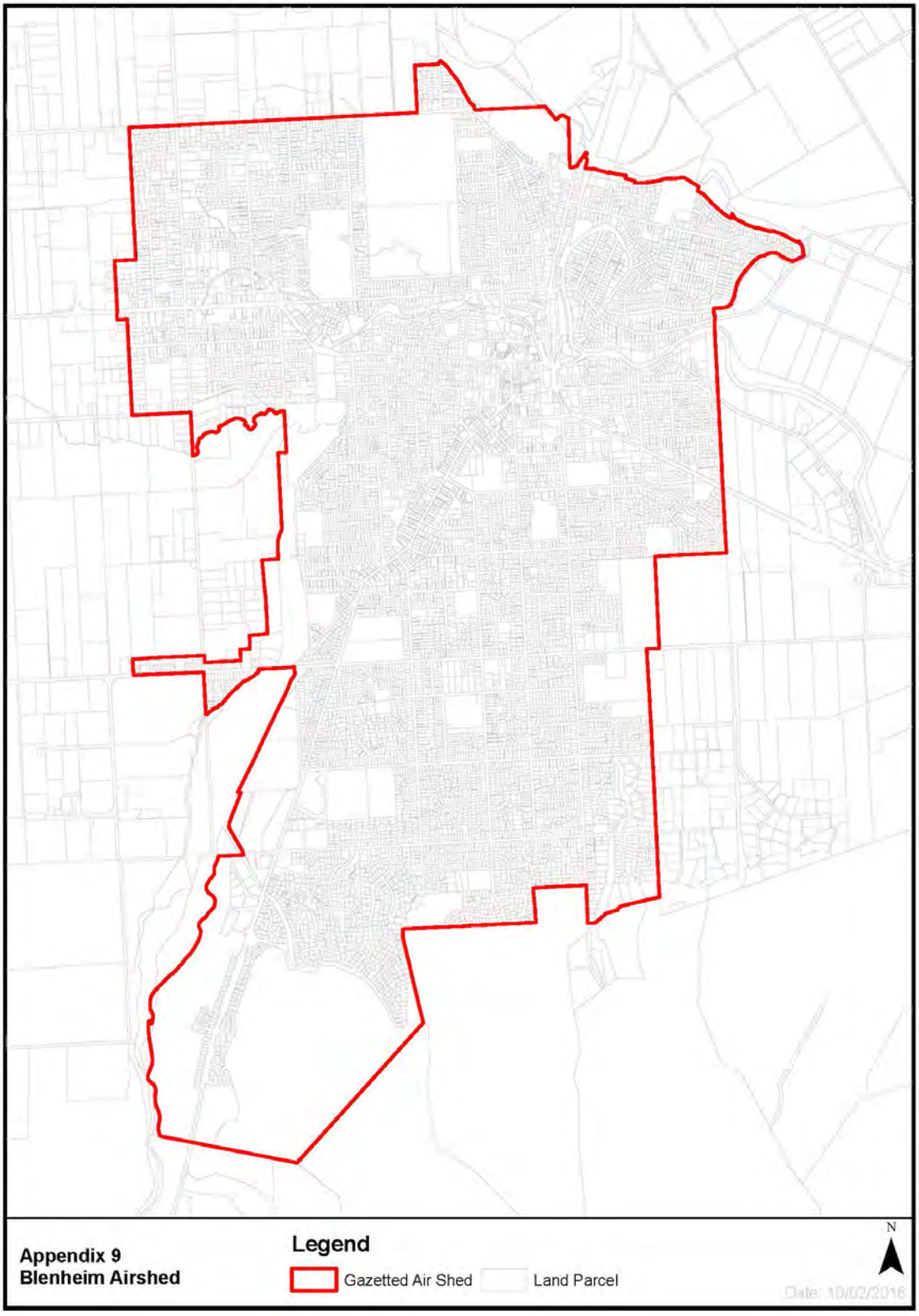
LFO		
SO_2 Emission Rate g/hr	**Indicative Heat Output**	**Chimney Height** Metres
179	40kW	12.0
448	100kW	>12.0*
896	200kW	>12.0*
2240	500kW	>12.0*
HFO		
SO_2 Emission Rate g/hr	**Indicative Heat Output**	**Chimney Height** Metres
259	40kW	>12.0*
649	100kW	>12.0*
1297	200kW	>12.0*
3243	500kW	>12.0*

LPG		
NO_2 Emission Rate g/hr	**Indicative Heat Output**	**Chimney Height** Metres
30	100kW	6.0
75	250kW	6.5
151	500kW	8.0
225	750kW	9.0
302	1.0MW	10.0
605	2.0MW	12.0
907	3.0MW	12.0
1209	4.0MW	12.0
1512	5.0MW	12.0
2116	7.5MW	12.0
3023	10.0MW	12.0

* chimney height requirement to be assessed through resource consent process.

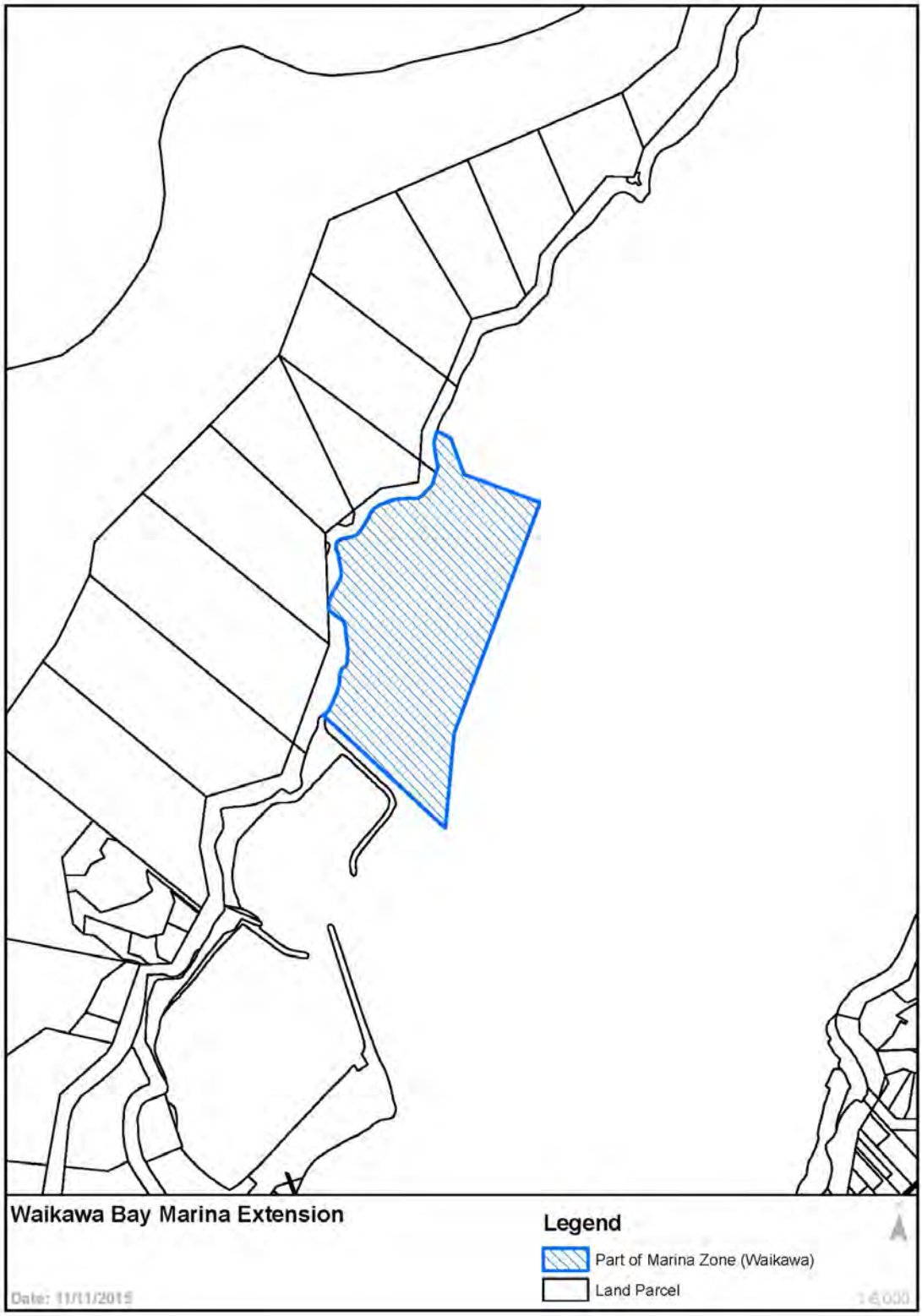
Appendix 9

Blenheim Airshed



Appendix 10

Waikawa Marina Zone



Appendix 12

Determination of Wave Energy

1. Wash Rule

1.1 Means a Maximum Wave Energy of 9 kilojoules per metre, which may be exceeded no more than once in 10 sequential Wave Records. The sequence of Wave Records need not be contiguous where instrument or system failure or presence of non-calm conditions or missed passage of ships would make any particular Wave Record unusable or unavailable.

2. Technical Information to be provided with applications for consent

2.1 To demonstrate that a ship will comply with the Wash Rule, resource consent applicants must submit technical information prepared by a competent professional based on either:

2.1.1 Accepted and properly calibrated computational models, physical models, analytical or empirical analysis allowing for the specific characteristics of the ship concerned and all the relevant operating conditions, navigation tracks, physical effects and conditions within the National Transportation Route; or

2.1.2 Direct measurements specific to the ship concerned covering relevant operating and physical conditions; or

2.1.3 Combinations of the approaches outlined above.

2.2 Wave Energy must be calculated according to linear wave theory (also known as Airy wave theory), as outlined further below, based on the maximum zero down-crossing wave height and the corresponding zero down-crossing wave period in any Wave Record, as defined further in IAHR (1989).

2.3 Wave Energy must be determined at a standard depth of 3 metres for sites at which, in the opinion of a competent professional, are not significantly influenced by the effects of diffraction due to bathymetry and objects.

2.4 Applications for consent must include information detailing the following:

(a) The Data Recording Device(s) intended for recording ship navigation details;

(b) The intended format, mode of transmission and frequency of transmission to the Council of data recorded by the Data Recording Device(s) including any proposed protocols or arrangements for access to the Data Recording Device(s);

(c) The intended format, method and location of storage of data generated by the Data Recording Device(s) that is held by the consent holder as archived information including any proposed protocols or arrangements for access to that archived information;

(d) The intended maximum Ship Speed through the National Transportation Route including spatial definition of any areas of the National Transportation Route within which maximum Ship Speed is to be varied;

(e) For applications made as a Controlled Activity, details of the location, timing, duration and frequency of events for measuring Wave Energy;

(f) For applications made as a Discretionary Activity, a description of any measures proposed for monitoring the effects of waves generated by the ship on the coastal environment;

(g) The International Maritime Organisation number and name of the ship to which the application relates.

3. Approved Measurement Sites

3.1 For the purposes of assessing compliance with the Wash Rule under any of the methods listed in clause 1.1 above, Wave Energy must be calculated from assessments and measurements at a minimum of two sites in Tory Channel from the list of the Approved Measurement Sites in Table 1 below. Applicants are free to determine which of the Approved Measurement Sites are to be used, and must specify in the application which of the Sites have been adopted for assessment purposes. However, applicants must also ensure that a site from Table 1 is adopted that best represents conditions throughout each area in the National Transportation Route for which particular values of maximum Ship Speed and limits to the navigation corridor are proposed.

3.2 Where an applicant proposes differential speeds for identified areas within the National Transportation Route, the application must specify which Approved Measurement Sites are proposed to be used to determine the compliant speed for that area. The sites from Table 1 that are specified for this purpose should be representative of conditions within the areas identified in the application.

3.3 Once the representative sites have been determined then the Council's evaluation of the assessments and proposed maximum speed limits and navigation corridors will be confined to those sites.

3.4 Applicants must ensure that the analysis of effects at the selected sites covers the full range of ship operating conditions expected to be encountered over the life of the resource consent. Such conditions must include the full range of tidal flows, navigation paths, and the amount and distribution of hull displacement.

Table 1: Approved Measurement Sites

Channel	Location Description	NZGD2000 Co-ordinates	
Tory Channel	Ngaionui Point West, Arapawa Island	174° 10´.782 E	41° 14´.462 S
	Te Weka Bay	174° 11´.396 E	41° 14´.983 S
	Wiriwaka Point West, Arapawa Island	174° 12´.287 E	41° 14´. 192 S
	Tipi Bay West	174° 17′.001 E	41° 13′.699 S
Queen Charlotte Sound	Picton Point	174° 02′.177 E	41° 15′.283 S
	East Kahikatea	174° 07′.095 E	41° 14′.170 S

4. Direct measurement of wave properties

4.1 Wave properties used to calculate Wave Energy from a directly measured Wave Record must be determined according to the following conditions and assumptions:

(a) Measurements must be made by, or under the supervision of, a competent professional experienced in the measurement of waves using an appropriate, calibrated wave measurement instrument and accepted data analysis methodologies.

(b) Measurements must be made at any of the sites identified in Table 1 above and must be undertaken only in conditions when those sites are substantially clear of kelp and other obstacles.

(c) Measurements must be made in depths of water of between 1 and 5 metres. In order to calculate Wave Energy, the wave properties determined from the Wave Record at the point of measurement must be transformed to a standard depth of 3 metres using the following methodology or assumptions:

(i) Shoaling and refraction analysis to calculate a transformed wave height must be based on Snell's law assuming that the seabed contours are parallel with the direction of travel of the ship, and that the angle between the wave crests of the waves generated by the ship in deep water and the seabed contours is 55°.

(ii) A local water depth of D + ½H, where D is the average water depth and H is the measured wave height applicable to the Wave Record, must be adopted in the shoaling and refraction analysis for the purpose of calculating group wave celerity and wave length.

(iii) The effects of bottom friction, viscous effects and turbulence must be ignored.

(iv) Wave period must be unadjusted from that determined at the point of measurement.

(d) Measurements must be made only under calm conditions which shall be deemed to exist where the Significant Wave Height related to wind and other disturbances (other than the ship under evaluation) at the measurement site does not exceed 0.05 metres based on a Wave Record recorded for a duration of not less than 5 minutes immediately prior to recording ship Wave Energy.

(e) For the purposes of calculating wave characteristics under this Plan, the density of water must be taken as 1025 kilograms per cubic metre, the gravitational acceleration must be taken as 9.806 metres per second squared, and any other physical parameters required must be those applicable at a temperature of 15°C.

5. Assessment of speed through the water

5.1 The following method is an accepted methodology to determine Ship Speed where an appropriate instrumental approach is not available or where the hull-mounted instruments are faulty.

The speed through the water, V_W, is calculated from the speed over the ground, V_G, according to:

$$V_W = V_G - \lambda x U_T \quad (1)$$

in which λ is an index that describes the direction of travel of the ship (λ = 1 for ships travelling towards Picton, and λ = -1 for ships travelling away from Picton), and U_T is the speed of the tidal stream. The convention for the speed of the tidal stream is that it is positive for the flooding phase (i.e. tide level is rising) and negative for the ebbing phase (i.e. tide level is falling).

For the purposes of calculating the speed of the tidal stream, the Marlborough Sounds is deemed to consist of three zones. Each zone is named after the tidal stream data point marked B, C and D that is located within each zone as shown on Marine Chart NZ 6153. The speed of the tidal stream in each zone is calculated from:

$$U_T = A\cos\left(\frac{2\pi}{12}(t - t_{HT} + t_L)\right) \quad (2)$$

in which A is the amplitude of tidal stream speed (see Table 2 below), t is the time in hours since midnight, t_{HT} is the time of the nearest high-tide in Wellington, and t_L is the lag between the tidal stream and the high-tide at Wellington (see Table 2 below). The times use for t and t_{HT} must be to a consistent standard, either New Zealand Daylight Saving time (NZDT) or New Zealand Standard time (NZST) depending on the time of year. Equation 2 is a cosine fit to the tidal stream with a semi-diurnal period of 12 hours. The time of high tide is based on the figures published in the New Zealand Almanac (or an equivalent source). The tidal zones, their definitions, and values for the coefficients in equation 2, are given in Table 2 below.

Table 2: Tidal zones and tidal speed parameters that might be adopted to assess speed through the water

Zone	Description of Limits of Zone	A (knots)	t_L (Hour)
B	Zone anywhere in Queen Charlotte Sound, and separated from Tory Channel along latitude 41°14′ S at Dieffenbach Point.	0.3	-0.4
C	Zone in Tory Channel between latitude 41°14′ S at Dieffenbach Point at its western end and longitude 174°18′ E in Tory Channel at its eastern end.	1.8	-0.4
D	Zone near the Heads in Tory Channel located east of longitude 174°18′ E.	6.7	0.0

Appendix 13

Register of Significant Heritage Resources

Those features of a building, item, or structure that possess significant heritage value, therefore requiring the protection have been identified by reference to the following terms:

(a) Façade – the front face(s) of the building. On corner sites or sites with multiple street frontages, there may be more than one façade.

(b) Entire external building envelope – all external surfaces of the building/structure. The envelope includes walls, roofs and architectural elements which combine in creating the whole external appearance.

(c) Interior – architectural, decorative features inside the listed resource.

Note: Historic buildings, items, and structures are identified in purple on the planning maps with a number that corresponds to the Planning Map Notation listed below for each individual entry.

Schedule 1: Category I Heritage Resources.

This Schedule includes all Heritage New Zealand Category I Heritage Resources in Marlborough.

MEP Reference	HNZ List No.	Heritage Resource	Address	Value applies to
1	329	Rai Valley Pioneer Cottage	Opouri Rd, Carluke, Rai Valley	Building envelope and interior
2	7289	Brownlee Homestead	14 Cook St, Havelock	Building envelope and interior
3	240	Former post office	61 Main Rd, Havelock	Building envelope and interior
4	7450	The Edwin Fox anchor windlass	Dunbar Wharf, Picton Foreshore	Anchor windlass
5	7450	The Edwin Fox hull	Dunbar Wharf, Picton Foreshore	Hull
6	Wahi Tapu 7364	Pa site, burial site, battle site	Moioio Island, Tory Channel	Island
7 & 8	7701 - Historic Area	Tory Channel Leading Lights	Lighthouse Reserve, Whekenui, Arapawa Island, Tory Channel	Building envelope and interior
9	Wahi Tapu 7737	Brothers Island	The Brothers / Nga Whatu, Cook Strait	Island
10	1479	Langley Dale Station Homestead	Northbank Road, Renwick	Building envelope and interior

MEP Reference	HNZ List No.	Heritage Resource	Address	Value applies to
11	1539	Woodbourne Homestead and farm	720 New Renwick Rd, Blenheim	Whole property including buildings and structures
12	241	Ōpaoa River Bridge	SH1, Blenheim	Building envelope
13	243	War Memorial and Clock Tower	Seymour Square, Blenheim	Building envelope and interior
14	242	St Mary's Church (Catholic)	57 Maxwell Rd, Blenheim	Building envelope and interior
15	7748	Pilot's House	926 Wairau Bar Rd, Spring Creek	Building envelope and interior

Schedule 2: Category II and Locally Significant Heritage Resources

This Schedule includes all Heritage New Zealand Category II Heritage Resources in Marlborough, as well as some Heritage Resources considered to be locally significant.

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
1 – 4	7755	Argillite quarries	Oparapara (Samson Bay), Croisilles - French Pass Road, Croisilles Harbour	Representative samples of quarry sites from which metasomatised argillite for tool manufacture was obtained
5		Cottage Hospital	4 Old Coach Rd, Havelock	Building envelope
6	1477 1494	General Store Pelorus Traders	75 and 77 Main Rd, SH 6, Havelock	Building envelope
7	1496	St Peters Church (Anglican)	30 Lawrence St, Havelock	Building envelope
8		Cemetery monument marking 1843 Wairau Affray	Tuamarina Cemetery	Monument
9		House	310 Waikawa Rd, Waikawa	Building envelope
10		Plaque - Ropoama's Well	315 Waikawa Road, Waikawa.	Plaque
11		Plaque - Memorial to Picton Freezing Works 1900 - 1983	Picton Harbour Lookout, QC Drive	Plaque

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
12		House	16 Hampton St, Picton	Building envelope
13	5392	Picton Railway Station	3-5B Auckland St, Picton	Building envelope
14		Plaque - Memorial to Captain Cook	Picton Foreshore	Plaque
15		WWI Memorial Gateway	London Quay, Picton Foreshore	Archway building including banisters
16		Former Railway Station Platform	Picton Foreshore	Area to east of WWI Memorial, including wall along London Quay
17		Verandah and lattice work above cafe.	6 High St, 22-24 London Quay, Picton	Verandah and lattice work
18	5108	Oxley's Hotel	1-9 Wellington St and London Quay, Picton	Façade and verandas
19		House (former Presbyterian Manse)	34 Auckland St, Picton	Building envelope
20		Fifth Bank	33 Wellington St, Picton	Building envelope
22 & 23		WWII Memorial Gateway	77 Waikawa Rd, Picton	Stonework gateway and fence to marina
24		House	Picton Power House Reserve, 8-10 Wairau Rd, Picton	Building envelope
25		House	7 Rutland St, Picton	Building envelope
26		House	28 Waikawa Rd, Picton	Façade
27	2967	House (known as Sennen House)	9 Oxford St, Picton	Building envelope and interior
28		House	20 Buller St, Picton	Building envelope
29		House	10 Market St, Picton	Building envelope
30		Plaque – Site of Provincial Building, first capital of Marlborough.	36 Broadway, Picton	Plaque
31		House (Former Picton Collegiate School 1899)	22 Broadway, Picton	Building envelope
32	1543	Sundial	Holy Trinity Church Grounds, Wairau Rd, Picton	Sundial
33		House (former police station, jail)	5 Waitohi Pl, Picton	Original foundations of police station office, store and cells form perimeter of Playcentre sandpits
35		House (former Picton Convent)	123 Wellington St, Picton	Building envelope and interior
36		House	129 Wellington St, Picton	Building envelope

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
37		House	14 Scotland St, Picton	Building envelope
38		House	47 Kent St, Picton	Building envelope
39		House	51 Durham St, Picton	Building envelope
40		House	68 Kent St, Picton	Building envelope
41		House	48 York St, Picton	Building envelope
42		House	8 Canterbury St, Picton	Building envelope
43		House (Typical workers cottage)	64 Devon St, Picton	Building envelope
44	7529 Historic Area	Defence Battery 1942-1945	Blumine Island, Queen Charlotte Sound	Wharf and accommodation area associated with the emplacements comprising of terraces, foundations, drains and dam.
45	7529 Historic Area	Defence Battery 1942-1945	Blumine Island, Queen Charlotte Sound	Gun emplacement complex, comprising of gun emplacement, magazine, observation post and water tank.
46	7529 Historic Area	Defence Battery 1942-1945	Blumine Island, Queen Charlotte Sound	Gun emplacement complex, comprising of gun emplacement, magazine and observation post.
47	7529 Historic Area	Defence Battery 1942-1945	Blumine Island, Queen Charlotte Sound	Accommodation area associated with the emplacements comprising of concrete steps, terraces, concrete foundations, drains, chimney and two water tanks.
48		Memorial Cairn & Capstan	Ngakuta Bay, Port Underwood	Memorial
49	7333 Wahi tapu Area	Urupā and archaeological remains of the original Māori occupiers, and later Māori and European whaling families.	Te Awaiti Bay, Arapawa Island, Tory Channel	
50		William Keenan the Elder whānau urupā	Te Awaiti Bay, Arapawa Island, Tory Channel	
51		Perano Whaling Station	Fishermans Bay, Arapawa Island, Tory Channel	Building footprint
52		Oil store building for Leading Lights	Whekenui Bay, Arapawa Island, Tory Channel	Building envelope

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
53	1469	Church of St John in the Wilderness (Anglican). Memorial gates dedicated to Nathanial and Hannah Bragg.	SH1, Koromiko	Building envelope and interior. Memorial gates
54	2942	House (known as 'Woodside')	Kaituna - Tuamarina Rd, Tuamarina	Building envelope
55		Tuamarina Settlers Memorial	SH 1, Tuamarina	Building envelope
56	1478	House (Green Hills Villa)	145 Blind Creek Rd, Tuamarina	Building envelope
57	1475	Flaxmill including weighbridge	Chaytors Rd, Rarangi, Marshlands	Building envelope
58	1470	Cob cottage	Murrays Rd, Spring Creek	Building envelope
59	1495	St Luke's Church (Anglican)	20-22 Ferry Rd, Spring Creek	Building envelope and interior
60	1531	Former St Mary's Convent	776 Rapaura Rd, Blenheim	Building envelope
61	9029 Historic Area	Kakapo Bay Whaling Station	Port Underwood	Land and building footprint
62		Island and plaque	Horahora Kakahu Island, Port Underwood	Island
63	1473	Cob Cottage (also schoolhouse)	Port Underwood Rd, Robin Hood Bay	Building envelope
64	1467	Cable Station telegraph station building	Whites Bay	Building envelope and interior
65	1472	Cob house	2626 SH 63, Wairau Valley	Building envelope
66	1480	Langley Dale Station Cow Byre	Northbank Rd, Renwick	Building envelope
67	1481	Langley Dale Station Blacksmiths Shop	Northbank Rd, Renwick	Building envelope
68	1482	Langley Dale Station Scab Dip	Northbank Rd, Renwick	Building envelope
69	1483	Langley Dale Station dog meat boiler	Northbank Rd, Renwick	Building envelope
70	1485	Langley Dale Station - Cob Stables, first built 1863. Granary & chaff house	Northbank Rd, Renwick	Building envelopes

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
71	1486	Langley Dale Station Workshop	Northbank Rd, Renwick	Building envelope
72	2922	Cob house	47 Inkerman St, Renwick	Building envelope
73	1474	Omaka Presbyterian Church (First Church)	1 Nicholson St. and Havelock St, Renwick	Building envelope and interior
74	9044	Sunnymead Farm Cottage	71A Inkerman St, Renwick	Building envelope
75	1466	Bankhouse Station Homestead	1081 SH 63, (Renwick – Kawatiri)	Building envelope
76	2937	Murray Downs Homestead and Stone Lined Wells	238 Waihopai Valley Rd, Blenheim	Building envelope
77	2939	Wrekin toolshed (former dairy)	Wrekin Rd, Waihopai Valley	Building envelope.
78	2926	Leefield Station Homestead	Waihopai Valley Rd, Blenheim	Building envelope(s)
79	2932	Leefield Station Maids Quarters	Waihopai Valley Rd, Blenheim	Building envelope(s)
80	2930	Leefield Station Shearers' Quarters (original cob cook shop / cookhouse)	Waihopai Valley Rd, Blenheim	Building envelope
81	2931	Leefield Station Looseboxes	Waihopai Valley Rd, Blenheim	Building envelope(s)
82	2929	Leefield Station Stables	Waihopai Valley Rd, Blenheim	Building envelope(s)
83		Plaque - Blenheim Rotary plaque marking flight site	Marlborough Airport, Middle Renwick Rd, Woodbourne	Plaque
84		Memorial - with inscription and reused parts from original flour mill situated at entrance on New Renwick Road.	720 New Renwick Rd, Blenheim	Memorial
85	2959	House	72 Murphys Rd, Blenheim	Building envelope
86	1507	Malt House Industrial building. (currently Dodsons Bistro)	1 Dodson St, Blenheim	Building envelope
87	1519	Early State House	31 Herbert St, Blenheim	Building envelope

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
89		House	44 Murphys Rd, Blenheim	Building envelope and interior
91	5470	Vercoes Flax Mill	Murphys Stream, Nelson St, Blenheim	Concrete foundations
92	1520	House	180 High St, Blenheim	Building envelope
93	1528	House (Piki Arero)	143 Charles St, Blenheim	Building envelope
94	2955	House	16 Lee St, Blenheim	Building envelope
95	1509	Blenheim Courthouse	Cnr Alfred St and Seymour St, Blenheim	Building envelope
96	1504	Blenheim School	42 Alfred St, Blenheim	Building envelope
97	1502	Blenheim Club	92 - 106 High St, Blenheim	Building envelope and interior, flagpole
98		Fountain WWII Memorial	Seymour Square, Blenheim	Building envelope
99		Blenkinsopp's Carronade (Old cannon)	Seymour St, Blenheim	Cannon
100	1535	Former Methodist Manse. (Currently Wain & Naysmith office building)	125-127 High St, Blenheim	Building envelope
101	1503	Blenheim Railway Station building	Sinclair St, (SH1), Blenheim	Building envelope
102	9301	Bank of Australasia (former)	62 High St, Blenheim	Building envelope
103	1506	Cleghorn Rotunda	Market Square, Blenheim	Building envelope
104	1533	Farmers Building	42-44 High St & Market St, Blenheim	Façade
105		Plaque - Site of James Wynen's raupo store, Blenheim's first place of business.	1 High St, Blenheim	Plaque
106	2963	Ōpaoa Wharf Building	2a Ōpaoa St, Blenheim	Building envelope
107	2956	House	19 Lee St, Blenheim	Building envelope and interior
108	2954	House	56 George St, Blenheim	Building envelope

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
109		Plaque - Plunket rooms formerly located on current MDC site. Foundation stone plaque at current rooms relocated in 1992	16 Henry St, Blenheim.	Plaque
110	1530	Former Public Trust Office Building	48-52 Queen St, Blenheim	Building envelope
111	1523	House	6 Monro St, Blenheim	Building envelope
112	1522	House	4 Monro St, Blenheim	Building envelope
113	1526	House	29 Percy St, Blenheim	Building envelope
114	1515	House	8 Poynter St, Blenheim	Land, building envelope and interior, including fittings and fixtures
116	1538	Former Whites Footwear Building (currently Hallensteins).	84-90 Market St, Blenheim	Façade
117	1513	House	60 Beaver Rd, Blenheim	Building envelope
118	1516	House	12 Eltham Rd, Blenheim	Building envelope
119	2958	House	106 Maxwell Rd, Blenheim	Building envelope
120	2957	House	72 Maxwell Rd, Blenheim	Building envelope
121	1521	House	82 Maxwell Rd, Blenheim	Land, building envelope and interior
122	2945	House (known as 'Copper Beech House')	73 Maxwell Rd, Blenheim	Building envelope
123	2964	House (Radfield House).	2 Leitrim St, Blenheim	Building envelope and interior
124	1505	Blenheim A&P Show Grounds - Brick wall and iron gates. Memorial to old sheep stations in Marlborough.	Maxwell Rd, Blenheim	Building envelope
125	1508	Blenheim A&P Show Grounds - covered sheep pens	Cnr Maxwell & Alabama Rds, Blenheim	Building envelope
126	2952	Blenheim A&P Show Grounds - Grandstand	Cnr Maxwell & Alabama Rds, Blenheim	Building envelope

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
127	5432	House (currently known as 'Addiscombe').	80 New Renwick Rd, Blenheim	Building envelope
128	1536	Wairau Public Hospital – Fever Ward (former)	Brayshaw Park	Building envelope
129	2934	Methodist Sunday School (former church)	Brayshaw Park	Building envelope
130	1471	Cobb cottage	SH 1, Riverlands	Building envelope and interior
131	5979 9561	Moa hunter site Wairau Bar / Te Pokohiwi	19 hectare gravel bar where Wairau River meets sea at Cloudy Bay.	
132	1498	Vernon Homestead	331 Redwood Pass Rd, Blenheim	Building envelope
133	1497	Ugbrooke Homestead	Ugbrooke Road, Lower Dashwood	Building envelope and interior
134	1532	Former St Mary's Presbytery (Catholic)	Marfell Downs, Sea View Rd, Seddon	Building envelope
135	2921	Blairich Chimney - part of boiler house of boiling down works used to rend down sheep carcasses for tallow	1480 Awatere Valley Rd	Brick chimney
136	1465	Altimarloch Station homestead (former)	2216 Awatere Valley Rd	Building envelope
137	2936	Mt Gladstone cob cottage	5911 Awatere Valley Rd	Building envelope
138	2924	Jordan Accommodation House (former)	3896 Awatere Valley Rd	Building envelope
139	1491	Mt Gladstone cuddy	5473 Awatere Valley Rd	Building envelope and interior
140	2935	Molesworth Station woolshed – 24 stand	10018 Awatere Valley Rd	Building envelope
141	1493	Molesworth Station cob cottage (first homestead of Molesworth Station)	10018 Awatere Valley Rd	Building envelope and interior

MEP Reference	HNZ List No. (if applicable)	Heritage Resource	Address	Value applies to
142	1492	Molesworth Station large cob homestead	10018 Awatere Valley Rd	Building envelope
143	1490	Langridge Station dry walled stock enclosure	8705 Awatere Valley Rd	Building envelope
144	1488	Langridge Station cob hut – staff bunkroom	8705 Awatere Valley Rd	Building envelope
145	7044	Landridge Station cob cottage	8705 Awatere Valley Rd	Building envelope
146	1489	Langridge Station cob oven	8705 Awatere Valley Rd	Building envelope

Schedule 3: Notable Trees

This Schedule includes all Notable Trees listed in Marlborough.

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
1		Howdens Bush Scenic Reserve, Endeavour Inlet, Queen Charlotte Sound	*Dacrydium cupressinum*	rimu
2		Foreshore reserve of Lochmara Bay West.	*Elaeocarpus dentatus*	hinau
3		165 Port Underwood Road, Waikawa.	*Sequoia sempervirens*	coast redwood
4	355	29a Ranui St, Picton	*Kunzea ericoides*	kanuka
5		McKormicks Rd, Whatamango Bay	*Dacrycarpus dacrydioides*	kahikatea
6	530	1 Sussex St, Picton	*Quercus robur*	English oak
7	470	Rev Samuel Ironside Memorial: Ngakuta Bay, Port Underwood	*Juglans regia*	Persian walnut
10		8 Taranaki St, Picton	*Podocarpus totara*	tōtara
11A		8 Taranaki St, Picton	*Dacrydium cupressinum*	rimu
11B		8 Taranaki St, Picton	*Dacrydium cupressinum*	rimu
11C		8 Taranaki St, Picton	*Dacrydium cupressinum*	rimu
12		8 Taranaki St, Picton	*Agathis australis*	kauri
13		10 Newgate St, Picton	*Quercus palustris*	pin oak
14		10 Newgate St, Picton	*Liriodendron tulipifera*	tulip tree
15		12 Newgate Street, Picton.	*Michelia doltsopa*	sweet michelia
16	480	27 Devon St, Picton	*Sophora microphylla*	kowhai
17	342	Cnr Kent and Buller Streets, Picton	*Quercus robur*	English oak
18	340	Picton School Grounds, Picton	*Podocarpus totara*	tōtara
19		38 York St, Picton	*Fraxinus excelsior*	European ash
20	341	38 York St, Picton	*Quercus cerris*	Turkey oak
21	346	Picton Police Station, Broadway St	*Quercus coccinea*	scarlet oak
22		123 Wellington St, Picton	*Magnolia grandiflora*	southern magnolia
23	412	22 Broadway, Picton	*Quercus robur*	English oak

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
24		11 Broadway St, Picton	*Dacrydium cupressinum*	rimu
25		11 Broadway St, Picton	*Fuscopora solandri*	tawhairauriki / black beech
26		11 Broadway St, Picton	*Lophozonia menziesii*	tawhai / silver beech
27		11 Broadway St, Picton	*Pittosporum eugenoides*	tarata / lemonwood
28		11 Broadway St, Picton	*Kunzea ericoides*	kanuka
29		38 York St, Picton	*Sophora microphylla*	kowhai
30A	332	Nelson Square Reserve, Picton	*Sequoiadendron giganteum*	giant sequoia
30B	332	Nelson Square Reserve, Picton	*Sequoiadendron giganteum*	giant sequoia
32		61 York Street, Picton.	*Nothofagus solandri*	tawhairauriki / black beech
33	347	Cnr Durham Street and South Terrace, Picton	*Quercus palustris*	pin oak
34		Picton Foreshore Reserve	*Quercus coccinea*	scarlet oak
35		Picton Foreshore Reserve	*Quercus robur*	English oak
36A-35N	475	Freeths Rd Reserve, Koromiko	*Fuscospora solandri*	tawhairauriki / black beech (14)
37A- 37Z 37AA-37AO	476	Freeths Rd Reserve, Koromiko	*Podocarpus totara*	tōtara (41)
38A-38Z 38AA-38AZ 39BA-38BG		Freeths Rd Reserve, Koromiko	*Nestegis lanceolata*	white maire (59)
39	473	Oyster Bay Farm, Port Underwood	*Metrosideros excelsa*	pohutukawa
40A		5 Camerons Rd, Okaramio	*Podocarpus totara*	tōtara
40B		5 Camerons Rd, Okaramio	*Podocarpus totara*	tōtara
41A	529	Spring Terrace, SH6, Kaituna	*Sequoiadendron giganteum*	giant sequoia
41B		Spring Terrace, SH6, Kaituna	*Sequoiadendron giganteum*	giant sequoia
42	528	Spring Terrace, SH6, Kaituna	*Eucalyptus obliqua*	messmate stringybark
43		Cemetery Hill, Tuamarina	*Corymbia ficifolia*	red flowering gum
44	244	Wairau Incident Reserve, SH1, Tuamarina	*Alectryon excelsus*	titoki

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
45A		145 Blind Creek Road, Tuamarina	*Araucaria heterophylla*	Norfolk Island pine
45B		145 Blind Creek Road, Tuamarina	*Araucaria heterophylla*	Norfolk Island pine
45C		145 Blind Creek Road, Tuamarina	*Araucaria heterophylla*	Norfolk Island pine
46		145 Blind Creek Road, Tuamarina	*Pinus ponderosa*	Ponderosa pine
47		145 Blind Creek Road, Tuamarina	*Cryptomeria japonica*	Japanese cedar
48	356	Spring Creek Holiday Park, Rapaura Rd, Blenheim	*Cedrus atlantica 'Glauca'*	Atlantic blue cedar
49	358	Spring Creek Holiday Park, Rapaura Rd, Blenheim	*Magnolia grandiflora*	southern magnolia
50	357	Spring Creek Holiday Park, Rapaura Rd, Blenheim	*Araucaria bidwillii*	bunya bunya
51		173 Murrays Road, Spring Creek	*Populus deltoides subsp. monilifera 'Frimley'*	necklace poplar
52	307	Sandhills, SH1, Grovetown	*Eucalyptus viminalis*	manna gum
53A	303	2326 State Highway 1	*Platanus x hispanica 'Acerifolia'*	London plane
53B		2326 State Highway 1	*Platanus x hispanica 'Acerifolia'*	London plane
53C		2326 State Highway 1	*Platanus x hispanica 'Acerifolia'*	London plane
53D		2326 State Highway 1	*Platanus x hispanica 'Acerifolia'*	London plane
53E		2326 State Highway 1	*Platanus x hispanica 'Acerifolia'*	London plane
53F		2326 State Highway 1	*Platanus x hispanica 'Acerifolia'*	London plane
53G		2326 State Highway 1	*Platanus x hispanica 'Acerifolia'*	London plane
54		10 Staces Rd, Grovetown	*Chamaecyparis lawsoniana*	Lawson's cypress
55		"Langley Dale", Northbank Rd, Wairau Valley	*Eucalyptus globulus subsp. globulus*	Tasmanian blue gum
56		"Langley Dale", Northbank Rd, Wairau Valley	*Quercus robur*	English oak

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
59	349	Hawkesbury Vineyard, Hawkesbury Rd, Renwick	*Eucalyptus macarthurii*	Camden woollybutt
60		Lake Timara, Renwick	*Populus yunnanensis*	Yunnan poplar
61	235	Lake Timara, Renwick	*Washingtonia filifera*	Californian fan palm
62	234	Lake Timara, Renwick	*Catalpa bignonoides*	Indian bean tree
63	233	Lake Timara, Renwick	*Abies pinsapo*	Spanish fir
64		"Woodbourne Homestead", New Renwick Rd, Blenheim	*Taxus baccata*	English yew
65A		"Woodbourne Homestead", New Renwick Rd, Blenheim	*Ilex aquifolium*	common holly
65B		"Woodbourne Homestead", New Renwick Rd, Blenheim	*Ilex aquifolium*	common holly
65C		"Woodbourne Homestead", New Renwick Rd, Blenheim	*Ilex aquifolium*	common holly
66A		"Woodbourne Homestead", New Renwick Rd, Blenheim	*Quercus robur*	English oak (20)
66A	350	The Woodbourne Homestead, Fairhall, Blenheim	*Quercus robur*	English oak
67	348	The Woodbourne Homestead, Fairhall, Blenheim	*Eucaluptus viminalis*	manna gum
68		"Woodbourne Homestead", New Renwick Rd, Blenheim	*Populus deltoides subsp. monilifera 'Frimley'*	cottonwood poplar
69	240	"Sevenoaks" 106 Brookby Rd, Renwick	*Cedrus deodara*	deodar cedar
70	237	"Sevenoaks" 106 Brookby Rd, Renwick	*Picea smithiana*	Himalayan spruce
71	236	"Sevenoaks" 106 Brookby Rd, Renwick	*Abies nordmanniana*	Caucasian fir

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
72	238	"Sevenoaks" 106 Brookby Rd, Renwick	*Abies pinsapo*	Spanish fir
73	239	"Sevenoaks" 106 Brookby Rd, Renwick	*Pseudotsuga menziesii*	Douglas fir
74		Cnr Thompson Ford & Old Renwick Rd, Blenheim	*Corymbia ficifolia*	red flowering gum
75		36A Mowat St, Blenheim	*Corymbia ficifolia*	red flowering gum
77A-77Z 77AA, 77AB		McKendry Park, Orchard Lane, Blenheim	*Juglans regia*	Persian walnut (28)
78A		McKendry Park, Orchard Lane, Blenheim	*Juglans regia 'Franquette'*	Franquette walnut
78B		McKendry Park, Orchard Lane, Blenheim	*Juglans regia 'Franquette'*	Franquette walnut
78C		McKendry Park, Orchard Lane, Blenheim	*Juglans regia 'Franquette'*	Franquette walnut
78D		McKendry Park, Orchard Lane, Blenheim	*Juglans regia 'Franquette'*	Franquette walnut
78E		McKendry Park, Orchard Lane, Blenheim	*Juglans regia 'Franquette'*	Franquette walnut
79		22 McLauchlan St, Blenheim Lot 2 DP 3419.	*Taxodium distichum*	swamp cypress
80		Marlborough Girls' College, McLauchlan Street, Blenheim	*Quercus robur*	English oak
81		22 McLauchlan St, Blenheim Lot 2 DP 3419.	*Dacrycarpus dacrydioides*	kahikatea
82		Ching Park, Blenheim	*Juglans regia*	Persian walnut
83A		Ching Park, Blenheim	*Juglans regia*	Persian walnut
83B		Ching Park, Blenheim	*Juglans regia*	Persian walnut
83C		Ching Park, Blenheim	*Juglans regia*	Persian walnut
84A	421	NMIT Campus, Budge St, Blenheim	*Juglans regia*	Persian walnut
84B		NMIT Campus, Budge St, Blenheim	*Juglans regia*	Persian walnut

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
84C		NMIT Campus, Budge St, Blenheim	*Juglans regia*	Persian walnut
84D		NMIT Campus, Budge St, Blenheim	*Juglans regia*	Persian walnut
84E		NMIT Campus, Budge St, Blenheim	*Juglans regia*	Persian walnut
84F		NMIT Campus, Budge St, Blenheim	*Juglans regia*	Persian walnut
84G		NMIT Campus, Budge St, Blenheim	*Juglans regia*	Persian walnut
85	420	NMIT Campus, Budge St, Blenheim	*Castanea sativa*	sweet chestnut
86	337	Cnr Budge & Shirtliff Streets, Blenheim	*Styphnolobium japonicum*	pagoda tree
87	544	NMIT Campus, Budge St, Blenheim	*Ginkgo biloba*	ginkgo
88A		NMIT Campus, Budge St, Blenheim	*Betula pendula*	silver birch
88B		NMIT Campus, Budge St, Blenheim	*Betula pendula*	silver birch
88C	546	NMIT Campus, Budge St, Blenheim	*Betula pendula*	silver birch
88D		NMIT Campus, Budge St, Blenheim	*Betula pendula*	silver birch
88E		NMIT Campus, Budge St, Blenheim	*Betula pendula*	silver birch
89	545	NMIT Campus, Budge St, Blenheim	*Liquidambar styraciflua*	liquidambar
90A		"Livermere" 294 Middle Renwick Rd, Blenheim	*Sequoiadendron giganteum*	giant sequoia
90B		"Livermere" 294 Middle Renwick Rd, Blenheim	*Sequoiadendron giganteum*	giant sequoia
91		"Livermere" 294 Middle Renwick Rd, Blenheim	*Araucaria bidwillii*	bunya bunya
92		"Livermere" 294 Middle Renwick Rd, Blenheim	*Cedrus deodara*	deodar cedar
93A		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek Road reserve	*Quercus robur*	English oak
93B		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek Road Reserve	*Quercus robur*	English oak

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
94		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek	*Quercus coccinea*	Scarlet Oak
95		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek		cedar
96		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek	*Prunus sp.*	Cherry
97A		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek	*Dacrydium cupressinum*	rimu
97B		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek	*Dacrydium cupressinum*	rimu
98		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek	*Sequoia sempervirens*	coastal redwood
99		Cnr Battys and Middle Renwick Roads adjacent to Murphys Creek	*Cordyline australis*	cabbage tree
100		82A Lakings Rd, Blenheim	*Agathis australis*	kauri
101		145 Middle Renwick Road, Blenheim - adjoining 5 Battys Rd	*Tilia × europaea*	European lime
102		40 Lakings Rd, Rd reserve, Blenheim	*Quercus robur*	English oak
103	431	40 Kingwell Drive, Blenheim	*Platanus x hispanica 'Acerifolia'*	London plane
104	432	40 Kingwell Drive, Blenheim	*Liriodendron tulipifera*	tulip tree
105	426	80A Nelson St, Blenheim	*Tilia × europaea*	European lime
106	933	84 Nelson St, Blenheim	*Metasequoia glyptostroboides*	dawn redwood
107		84 Nelson St, Blenheim	*Agathis australis*	kauri
108	416	84 Nelson St, Blenheim	*Ginkgo biloba*	ginkgo
109	415	84 Nelson St, Blenheim	*Taxodium distichum*	swamp cypress

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
110	428	80 Nelson St, Blenheim	*Schinus molle*	Peruvian pepper
111	35	19 Purkiss St, Blenheim	*Sequoia sempervirens*	coast redwood
112A		16 Bank St, Blenheim	*Sequoiadendron giganteum*	giant sequoia
112B	336	16 Bank St, Blenheim	*Sequoiadendron giganteum*	giant sequoia
113		16 Bank St, Blenheim	*Tilia × europaea*	European lime
114		Marlborough Girls' College, McLauchlan Street, Blenheim	*Metasequoia glyptostroboides*	dawn redwood
115		Marlborough Girls' College	*Quercus robur*	English oak
116	362	Church of Nativity, Alfred St, Blenheim	*Quercus robur*	English oak
117	365	Seymour Square, Blenheim	*Quercus palustris*	pin oak
118		Rd Reserve, Nelson St Roundabout, Blenheim	*Cedrus libani*	cedar of Lebanon
119	505	Blenheim School, 42 Alfred St, Blenheim	*Quercus robur*	English oak
120	503	Blenheim School, 42 Alfred St, Blenheim	*Juglans regia*	Persian walnut
121		12A Main Street, Blenheim	*Eucalyptus viminalis*	manna gum
122		Kinross St Carpark Blenheim	*Sequoiadendron giganteum*	giant sequoia
123		38 Beaver Rd, Blenheim	*Quercus palustris*	pin oak
124		2A Poynter St, Blenheim	*Fagus sylvatica 'Purpurea'*	copper beech
125	45	25 Percy St, Blenheim	*Sequoiadendron giganteum*	giant sequoia
126	25	70 Maxwell Rd, Blenheim	*Ginkgo biloba*	ginkgo
127	24	70 Maxwell Rd, Blenheim	*Cinnamomum camphora*	camphor
128	23	70 Maxwell Rd, Blenheim	*Sequoiadendron giganteum*	giant sequoia
129A		Whitney St School, Blenheim	*Sequoia sempervirens*	coast redwood
129B		Whitney St School, Blenheim	*Sequoia sempervirens*	coast redwood
129C		Whitney St School, Blenheim	*Sequoia sempervirens*	coast redwood

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
129D		Whitney St School, Blenheim	*Sequoia sempervirens*	coast redwood
130		52 Percy St, Blenheim	*Morus nigra*	mulberry
131		52 Percy St, Blenheim	*Olearia paniculata*	akiraho
132		52 Percy St, Blenheim	*Cordyline australis*	cabbage tree
133		52 Percy St, Blenheim	*Phyllocladus trichomanoides*	celery pine
134		52 Percy St, Blenheim	*Psuedopanax lessonii hybrid*	Lancewood hybrid
135		52 Percy St, Blenheim	*Sophora prostrata*	prostrate kowhai
136		52 Percy St, Blenheim	*Podocarpus nivalis*	snow tōtara
137		52 Percy St, Blenheim	*Podocarpus totara*	tōtara
138A		52 Percy St, Blenheim	*Dacrycarpus dacrydioides*	kahikatea
138B		52 Percy St, Blenheim	*Dacrycarpus dacrydioides*	kahikatea
138C		52 Percy St, Blenheim	*Dacrycarpus dacrydioides*	kahikatea
139A		52 Percy St, Blenheim	*Sophora microphylla*	kowhai
139B		52 Percy St, Blenheim	*Sophora microphylla*	kowhai
140		52 Percy St, Blenheim	*Psuedupanax ferox*	fierce lancewood
141		52 Percy St, Blenheim	*Prumnopitys ferruginea*	miro
142		52 Percy St, Blenheim	*Prumnopitys taxifolia*	matai
143		52 Percy St, Blenheim	*Nothofagus solandri var cliffortioides*	mountain beech
144A		52 Percy St, Blenheim	*Dacrydium cupressinum*	rimu
144B		52 Percy St, Blenheim	*Dacrydium cupressinum*	rimu
145A		52 Percy St, Blenheim	*Nothofagus fusca*	tawhairaunui / red beech
145B		52 Percy St, Blenheim	*Nothofagus fusca*	tawhairaunui / red beech
146		52 Percy St, Blenheim	*Fuscospora solandri*	tawhairauriki / black beech
147		80 Maxwell Rd, Blenheim	*Taxus baccata*	English yew

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
148A		Whitney St School, Blenheim	*Tilia × europaea*	European lime
148B	241	Whitney St School, Blenheim	*Tilia × europaea*	European lime
148C		Whitney St School, Blenheim	*Tilia × europaea*	European lime
148D		Whitney St School, Blenheim	*Tilia × europaea*	European lime
148E		Whitney St School, Blenheim	*Tilia × europaea*	European lime
149		Whitney Street School, Blenheim	*Cedrus libani*	cedar of Lebanon
150	242	Whitney St School, Blenheim	*Pseudotsuga menziesii*	Douglas fir
151	40	Eltham Road Reserve, Blenheim	*Sequoia sempervirens*	coast redwood
152	41	Eltham Road Reserve, Blenheim	*Liriodendron tulipifera*	tulip tree
153	42	Eltham Road Reserve, Blenheim	*Platanus x hispanica 'Acerifolia'*	London plane
154	37	Eltham Road Reserve, Blenheim	*Cedrus deodar*	deodar cedar
155A		108 Maxwell Rd, Blenheim	*Tilia × europaea*	European lime
155B		108 Maxwell Rd, Blenheim	*Tilia × europaea*	European lime
155C		108 Maxwell Rd, Blenheim	*Tilia × europaea*	European lime
155D		108 Maxwell Rd, Blenheim	*Tilia × europaea*	European lime
155E		108 Maxwell Rd, Blenheim	*Tilia × europaea*	European lime
155F		108 Maxwell Rd, Blenheim	*Tilia × europaea*	European lime
156		108 Maxwell Rd, Blenheim	*Michelia doltsopa 'Silver Cloud'*	silver cloud michelia
157		108 Maxwell Rd, Blenheim	*Fraxinus excelsior*	European ash
158	30	108 Maxwell Rd, Blenheim	*Magnolia grandiflora*	southern magnolia
159	28	108 Maxwell Rd, Blenheim	*Sequoiadendron giganteum*	giant sequoia
160	29	108 Maxwell Rd, Blenheim	*Aesculus hippocastanum*	horse chestnut
161	27	108 Maxwell Rd, Blenheim	*Ulmus minor*	field elm
162		81 Seymour St carpark, Blenheim	*Quercus robur*	English oak

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
163		12 McArtney Street, Blenheim.	*Platanus x hispanica 'Acerifolia'*	London plane
164		Marlborough Boys' College, Blenheim	*Podocarpus totara*	tōtara
165A		Marlborough Boys' College, Blenheim	*Dacrycarpus dacrydioides*	kahikatea
165B		Marlborough Boys' College, Blenheim	*Dacrycarpus dacrydioides*	kahikatea
166		Marlborough Boys' College, Blenheim	*Sophora sp.*	kowhai
167		Marlborough Boys' College, Blenheim	*Cordyline australis*	cabbage tree
168	587	Marlborough Boys' College, Blenheim	*Agathis australis*	kauri
169		Marlborough Boys' College, Blenheim	*Aesculus hippocastanum*	horse chestnut
170A	582	Marlborough Boys' College, Blenheim	*Quercus robur*	English oak
170B	585	Marlborough Boys' College, Blenheim	*Quercus robur*	English oak
170C	583	Marlborough Boys' College, Blenheim	*Quercus robur*	English oak
171		Marlborough Boys' College, Blenheim	*Fagus sylvatica 'Purpurea'*	copper beech
172		Marlborough Boys' College, Stevenson St Carpark, Blenheim	*Fagus sylvatica 'Purpurea'*	copper beech
173A		45 Houldsworth St, Blenheim	*Cupressus × leylandii*	Leyland cypress
173B		2 Park View Lane, Blenheim	*Cupressus × leylandii*	Leyland cypress
174		45 Houldsworth St, Blenheim	*Sequoiadendron giganteum*	giant sequoia
175	509	22 Weld St, Blenheim	*Juglans regia*	Persian walnut
176	506	22 Weld St, Blenheim	*Liquidambar styraciflua*	sweet gum
177A	507	22 Weld St, Blenheim	*Quercus robur*	English oak
177B		22 Weld St, Blenheim	*Quercus robur*	English oak
178		Burleigh Park, New Renwick Rd, Blenheim	*Abies sp.*	fir
179A		Burleigh Park, New Renwick Rd, Blenheim	*Eucalyptus viminalis*	manna gum

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
179B	338	Burleigh Park, New Renwick Rd, Blenheim	*Eucalyptus viminalis*	manna gum
180	511	75 Litchfield St, Blenheim	*Quercus palustris*	pin oak
181	510	75 Litchfield St, Blenheim	*Tilia × europaea*	European lime
182		32 Weld St, Blenheim	*Fagus sylvatica 'Purpurea'*	copper beech
183		32 Weld St, Blenheim	*Schinus molle*	Peruvian pepper
184		32 Weld St, Blenheim	*Cupressus torulosa*	Bhutan cypress
185		"Bethsaida Home", Litchfield St, Blenheim	*Magnolia grandiflora*	southern magnolia
186		"Bethsaida Home", Litchfield St, Blenheim	*Aesculus hippocastanum*	horse chestnut
187A	343	Bethsaida Home, Litchfield St, Blenheim	*Quercus robur*	English oak
187B		Bethsaida Home, Litchfield St, Blenheim	*Quercus robur*	English oak
188		5B Burden St, Blenheim	*Quercus robur*	English oak
189		Rema Reserve, Hope Drive, Blenheim	*Eucaluptus viminalis*	manna gum
190A		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190B		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190C		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190D		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190E		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190F		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190G		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190H		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190I		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
190J		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190K		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190L		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
190M		Morrington Reserve, Blenheim	*Eucalyptus viminalis*	manna gum
191A		Rd Reserve 124 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
191B		Rd Reserve 124 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
192		Rd Reserve 136 Wither Rd, Blenheim	*Eucalyptus viminalis*	manna gum
193		Rd Reserve 138 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
194A		Rd Reserve 140 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
194B		Rd Reserve 140 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
194C		Rd Reserve 140 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
195A		Rd Reserve 142 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
195B		Rd Reserve 142 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
195C		Rd Reserve 142 Wither Rd, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
197A		Rd Reserve 186 Redwood St, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
197B		Rd Reserve 186 Redwood St, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
197C		Rd Reserve 186 Redwood St, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
197D		Rd Reserve 186 Redwood St, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
197E		Rd Reserve 186 Redwood St, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
197F		Rd Reserve 186 Redwood St, Blenheim	*Eucalyptus leucoxylon 'Rosea'*	pink flowering gum
198		Rd Reserve 188 Redwood St, Blenheim	*Eucalyptus viminalis*	manna gum

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
199A		Rd Reserve 190 Redwood St, Blenheim	*Eucalyptus viminalis*	manna gum
199B		Rd Reserve 190 Redwood St, Blenheim	*Eucalyptus viminalis*	manna gum
200		Rd Reserve 200 Redwood St, Blenheim	*Eucalyptus viminalis*	manna gum
201A		"Lansdowne" 2641 Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
201B		"Lansdowne" 2641 Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
202		"Lansdowne" 2641 Wairau Valley	*Cedrus deodara*	deodar cedar
203		"Lansdowne" 2641 Wairau Valley	*Sequoia sempervirens*	coast redwood
204A		Hillersden Farm, Wairau Valley	*Quercus petraea*	sessile oak
204B		Hillersden Farm, Wairau Valley	*Quercus petraea*	sessile oak
204C		Hillersden Farm, Wairau Valley	*Quercus coccinea*	scarlet oak
204D		Hillersden Farm, Wairau Valley	*Quercus coccinea*	scarlet oak
205A		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205B		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205C		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205D		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205E	482	Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205F		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205G		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205H		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205I		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
205J		Hillersden Farm, Wairau Valley	*Sequoiadendron giganteum*	giant sequoia
206A		Hillersden Farm, Wairau Valley	*Quercus rubra*	red oak
206B		Hillersden Farm, Wairau Valley	*Quercus rubra*	red oak

MEP Reference	NZTR ref (if applicable)	Address / Location	Species Name	Common Name
207A		Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207B	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207C	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207D	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207E	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207F	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207G	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207H	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207I	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207J	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
207K	413	Hillersden Farm, Wairau Valley	*Pseudotsuga menziesii*	Douglas fir
208A		Hillersden Farm, Wairau Valley	*Aesculus hippocastanum*	horse chestnut
208B	478	Hillersden Farm, Wairau Valley	*Aesculus hippocastanum*	horse chestnut
209A	477	Hillersden Farm, Wairau Valley	*Tilia × europaea*	European lime
209B		Hillersden Farm, Wairau Valley	*Tilia × europaea*	European lime
209C		Hillersden Farm, Wairau Valley	*Tilia × europaea*	European lime
210	912	Hillersden Farm, Wairau Valley	*Quercus robur*	English oak
211	485	Hillersden Farm, Wairau Valley	*Chamaecyparis nootkatensis*	Nootka cypress
212	484	Hillersden Farm, Wairau Valley	*Cedrus atlantica*	Atlantic cedar
213		17 Nursery Lane, Seddon	*Eucalyptus globulus*	Tasmanian blue gum

Appendix 14

Schedule of Designated Land

Minister of Defence

ID No.	Map No.	Site Description	Legal Description	Designation
A1	85, 86, 158, 159	Woodbourne Air Base	Pt Lot 1 DP 3433, Pt Lot 2 DP 2563, Pt Sec 166 Omaka DIST, Pt River Bed Blk XIV Cloudy Bay SD, Pt Lots 5 & 6 DP 1326, Pt Sec 62 Omaka DIST, Pt Sec 166 Omaka DIST, Pt DP 420, Pt Sec 74 Wairau DIST, Pt Sec 76 Omaka DIST, Pt Sec 73 Omaka DIST, Pt Sec 72 Omaka DIST, Sec 234 Omaka DIST,	Defence Purposes RNZAF Base Woodbourne
A2	85, 86, 158, 159	Woodbourne Air Base	Airspace	Defence Purposes Designated airport height restrictions providing for the operation of RNZAF Base Woodbourne

A1 – Explanation – RNZAF Base Woodbourne

To be utilised for any or every purpose required by Section 5 of the Defence Act 1990, as follows:

(a) The defence of New Zealand, and of any area for the defence of which New Zealand is responsible under any Act;

(b) The protection of the interests of New Zealand, whether in New Zealand or elsewhere:

(c) The contribution of forces under collective security treaties, agreements or arrangements;

(d) The contribution of forces to, or for any of the purposes of, the United Nations, or in association with other organisations or states and in accordance with the principles of the charter of the United Nations.

(e) The provision of assistance to the civil power either in New Zealand or elsewhere in time of emergency; and

(f) The provision of any public service.

A2 – Explanation – Height Restrictions

Woodbourne Airport Height Restrictions:

(a) Main runway 06/24

The main runway is 1425 metres long and 45.7 metres wide and is orientated on a bearing of 86o00 True and has a sealed surface.

(b) Main Strip

The main strip is currently 1545 metres long and 152.5 metres wide and contains the main runway symmetrically within it.

Main Take-off Climb/Approach Slopes

Each of the two take-off climb/approach slopes off the main strip rises at a gradient of 1.6% (1 in 62.5) over a horizontal distance of 15000 metres. In addition there is a curved take-off climb surface with its origin at the western end of the main strip. The base line is 152.5 metres wide and extends straight ahead for a distance of 914 metres then curves right on a centre line radius of 1295.4 metres until it intercepts the 45 metres horizontal surface. The slope of this surface has a gradient of 1.6% (1 in 62.50). From point of commence of turn there is a 4.6 metre vertical step down across the full width of the fan and the gradient then continues on from this lower level at 1.6%.

(c) Main Strip Take-off climb/Approach Fan expansion

Each take-off climb/approach slope extends over a horizontal distance specified below and is symmetrically disposed about the extended centre line of the strip with its sides diverging uniformly outward at a rate of 15% ($8^0$32') from the corners of each strip end. In the case of the turning flight path surface a 4.6 metre step down occurs at the commencement of the turn and the whole width of the surface then continues.

(d) Parallel Grass Runway 06/24

Running parallel to the main sealed runway 06/24 is a grass strip of 1425 metres by 60 metres. Transitional side slopes and take-off climb/approach fans originate from this strip in the same manner as for the main runway.

Subsidiary Strip 10/28

The subsidiary strip is 1182 metres long and 90 metres wide and is orientated on a bearing of 121^{o}88 True.

Parallel Grass runway and Subsidiary Strip Take-off Climb/Approach Slopes

Each of the two take-off climb approach slopes off the subsidiary strip rises at a gradient of 2.5% (1 in 40) over a horizontal distance of 15000 metres for the parallel grass runway and 2500 metres for the subsidiary strip.

Transitional Slopes

These extend upwards and outwards from both the sides of each approach slope and the length of the strip edge rising at a gradient of 14.3% (1in 7) to intercept the horizontal surface.

Horizontal Surface

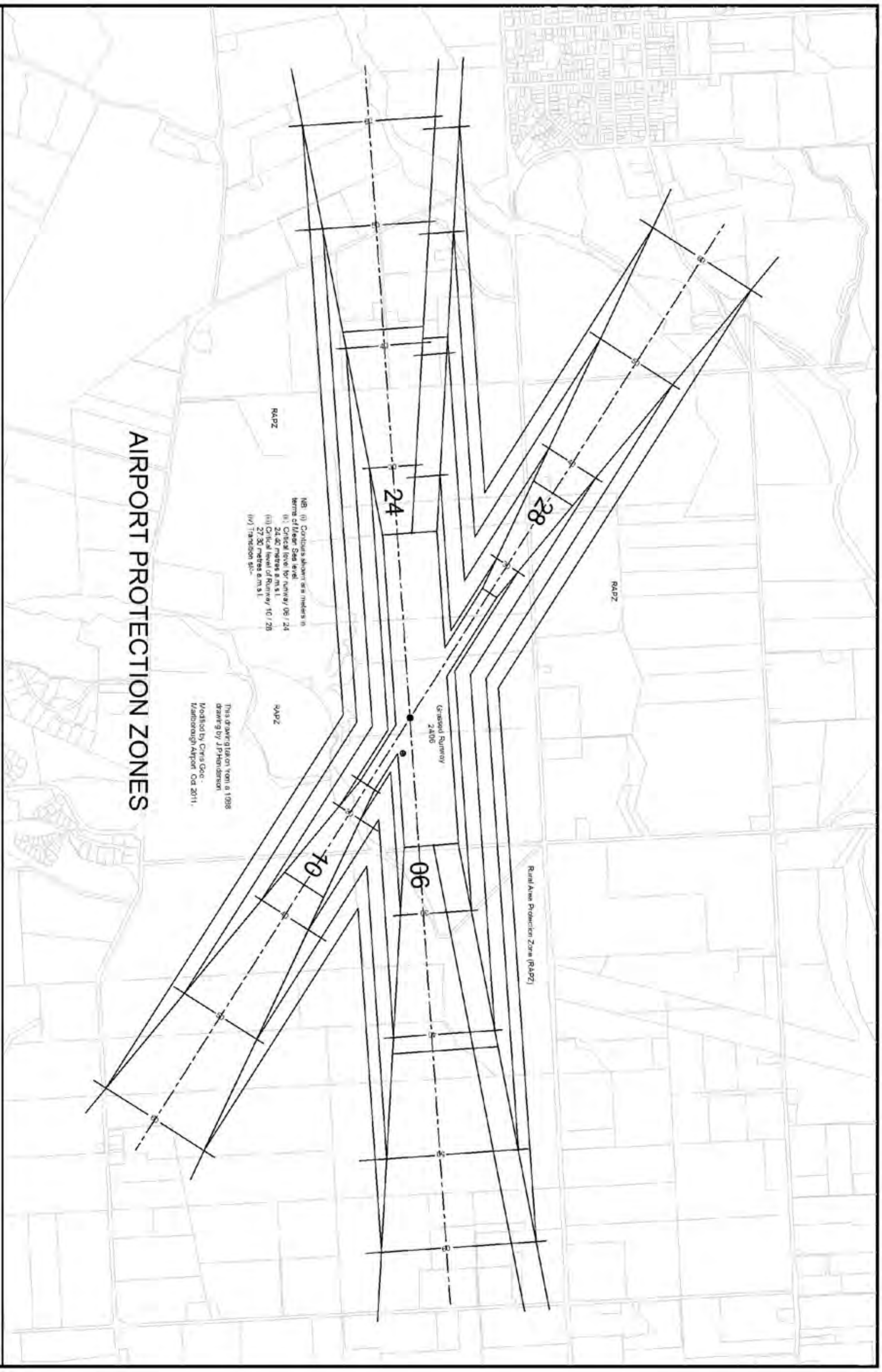
The horizontal surface is a horizontal plane, with a height of 45 metres above the established airport datum and extending 4000 metres from all four sides of the strip edge. Where ground rises so that it penetrates or becomes close to the horizontal surface this surface may be adjusted in conformity with the ground so as to provide a vertical clearance of 10 metres above ground level.

Conical Surface

The conical surface extends from the periphery of the horizontal surface upwards and outwards at a slope of 5% until a height of 150 metres above the airfield datum is reached. Where ground rises so that it penetrates or becomes close to the conical surface then this surface may be adjusted in conformity with the ground so as to provide vertical clearance of 10 metres.

Note:

All height restrictions are based on Civil Aviation (AC 139.6) obstacle limitation surfaces.
All elevations are provided in metres above average mean sea level unless otherwise stated.



Designation: A2

Purpose: Defence Purposes

Designated airport height restrictions providing for the operation of RNZAF Base Woodbourne

Requiring Authority: Minister of Defence

Date: 16/11/2015

Marlborough District Council

Roads:

All roads in Marlborough for which the Council has financial responsibility are designated for Roading Purposes. This includes any land:

(a) That is a road; or

(b) Is laid out by the Council as a road; or

(c) Is vested in the Council for the purpose of a road as shown on a deposited survey plan; or

(d) Is vested in the Council as a road pursuant to any other legislation;

For the avoidance of doubt, the designation includes:

(e) Any access way or service lane, or any land laid out or constructed by or vested in the Council as an access way or service lane; or

(f) Any square or place within the road reserve intended for the use of the public generally; or

(g) Every bridge, culvert, drain, ford, grate, building, or other thing belonging to the Council utilised for roading purposes within the road reserve.

This designation does not include State Highway. See the New Zealand Transport Agency designation for further details.

Explanation:

Description of Roading Purposes:

> *To control, manage and improve the roading network including planning, design, research, construction and maintenance relating to all land within the designation. Such activities may involve realigning the road, altering its physical configuration, culverts, bridges and associated protection works.*

Other designations:

ID No.	Map No.	Site Description	Legal Description	Designation
B1	30, 171	Taylor Pass Road, Blenheim	Lot 2 DP 9569	Bluegums Landfill
B2	9, 159	Alfred Street, Blenheim	Lot 1 DP 413525	Carpark
B3	34, 138	Wellington and High Streets, Picton	Lot 1 DP 12206, Pt Sec 1244 Town of Picton, Pt Lot 1 DP 1682, Pt Lot 2 DP 1682, Lot 1 DP 1972, Pt Lot 3 DP 1682, Lots 1, 2 and 3 DP 7913, Pt Sec 1160 Town of Picton	Carpark
B4	134	Deep Creek Cemetery Wakamarina Road	Sec 20 Blk XIV Wakamarina SD	Cemetery
B5	158	Fairhall Cemetery New Renwick Road, Fairhall	Pt Lot 1 DP 4468	Cemetery
B6	136	Mahikipawa Cemetery Queen Charlotte Drive	Pt Sec 39 Blk IX Linkwater SD	Cemetery

ID No.	Map No.	Site Description	Legal Description	Designation
B7	115	Manaroa Cemetery Manaroa / Hopai Road,	Pt Sec 7 Blk V Orieri SD	Cemetery
B8	19, 20, 25, 26, 159	Omaka Cemetery Taylor Pass Road, Blenheim	Lot 2 DP 771, Pt Sec 25 Blk III Taylor Pass SD	Cemetery
B9	121	Rai Valley Cemetery SH 6, Rai Valley	Sec 37 Blk I Wakamarina SD	Cemetery
B10	186	Seddon Cemetery Marama Road, Seddon	Sec 9 Blk XII Clifford Bay SD	Cemetery
B11	57, 135	Slogan Street, Havelock	Sec 61Town of Havelock, Sec 220 Town of Havelock, Sec 62 Town of Havelock	Cemetery
B12	80, 149	Tuamarina Cemetery Cotterill Street, Tuamarina	Lot 1 DP 1442, Sec 122 SO 6146	Cemetery
B13	202,203	Ward Cemetery Kaka Road, Ward	Sec 21 Blk VI Cape Campbell SD	Cemetery
B14	33, 34, 138	Picton Cemetery	Lot 1 DP 12271, Pt Secs 573 – 577 Town of Picton, Sec 1178 Town of Picton	Cemetery - Picton
B15	33, 34, 36, 138	Picton Cemetery Gravesend Picton	Lot 2 DP 7988 and Lot 1 DP 8481	Cemetery – Picton Extension
B16	58, 186	Richmond Street, Seddon	Sec 12 Blk XIV Town of Seddon	Fire Station
B17	27, 159	Harling Park Howick Road, Blenheim	Lot 1 DP 4996	Flood Control
B18	8, 159	Boyce Street, Blenheim	Lot 22 DP 3414	Flood Control Structure
B19	11, 159	Budge Street, Blenheim	Lot 2 DP 3460	Flood Control Structure
B20	9, 159	Horton Street, Blenheim	Lot 31 DP 4921	Flood Control Structure
B21	26, 159	Leafmare Subdivision Hope Drive, Blenheim	Lot 98 DP 9834	Flood Control Structure
B22	14, 159	Monro Street, Blenheim	Lot 1 DP 5786, Lot 2 DP 1318	Flood Control Structure
B23	9, 159	Andrew Street, Blenheim	Legal Road	Flood Pumping Station
B24	8, 9, 159	Nelson Street, Blenheim	Lot 2 DP 5503	Flood Pumping Station
B25	4, 159	Old Renwick Road, Blenheim	Sec 71 Blk XVI Cloudy Bay SD	Flood Pumping Station
B26	9, 159	Park Terrace, Blenheim	Lot 1 DP 6075	Flood Pumping Station
B27	9, 159	Symons Street, Blenheim	Lot 1 DP 4778	Flood Pumping Station
B28	9, 159	Waterlea Green, Blenheim	Lot 2 DP 339940	Flood Pumping Station
B29	150	Pukaka Floodway		Floodway Purposes and River Control
B30	159	Fairhall Floodway		Floodway Purposes and River Control Works

ID No.	Map No.	Site Description	Legal Description	Designation
B31	160	Lower Ōpaoa		Floodway Purposes and River Control Works
B32	149, 160	Lower Wairau River		Floodway Purposes and River Control Works
B33	158, 159	Omaka River		Floodway Purposes and River Control Works
B34	25, 26, 159	Rifle Range		Floodway Purposes and River Control Works
B35	54, 159, 160	Riverlands Co-op Drain		Floodway Purposes and River Control Works
B36	160	Roses Overflow		Floodway Purposes and River Control Works
B37	22, 28, 159	Sutherlands Stream		Floodway Purposes and River Control Works
B38	8, 9, 14, 19, 20, 25, 159	Taylor River		Floodway Purposes and River Control Works
B39	3, 4, 5, 9, 10, 159	Upper Ōpaoa		Floodway Purposes and River Control Works
B40	39, 40, 41, 138	Waikawa Floodway		Floodway Purposes and River Control Works
B41	149, 150	Wairau Diversion		Floodway Purposes and River Control Works
B42	148, 149, 157, 158	Wairau River Floodway		Floodway Purposes and River Control Works
B43	34, 138	Waitohi Floodway		Floodway Purposes and River Control Works
B44	157	Langley Dale Northbank Road	Part of Lot 1 DP 7107	Quarry
B46	167	Parsons Road, Wairau Valley	Lot 4 DP 3935	Quarry
B47	150	Pukaka Road, Tuamarina	Lot 1 DP 9844 & Pt Lot 1 DP 8924	Quarry
B48	146	Mt Riley	Crown Land Survey Office Plan 5479	Radio/communication, telecommunication broadcasting and associated purposes

ID No.	Map No.	Site Description	Legal Description	Designation
B49	135	Takorika, Havelock	Lot 1 DP 7937, Sec 2 Sec 5 Blk XI Wakamarina SD, Crown Land Survey Office Plan 5479	Radio/communication, telecommunication broadcasting and associated purposes
B50	138	The Elevation	Lot 3 DP 7961 & Pt Sec 100 Waitohi District	Radio/communication, telecommunication broadcasting and associated purposes
B51	185	The Ned Taylor Pass	Lot 5 DP 11451	Radio/communication, telecommunication broadcasting and associated purposes
B52	139	Whatamonga Ridge	Sec 8 and 9 Blk XI Arapawa SD, Pt Waikawa Sec 2C2, Lot 5 DP 374961	Radio/communication, telecommunication broadcasting and associated purposes
B53	172	Wither Hills	Lot 1 DP 8914, Sec 2 and Sec 8 Blk IV Taylor Pass SD, Lot 615 DP 409373	Radio/communication, telecommunication broadcasting and associated purposes
B54	52, 158	Renwick Museum and Library High Street, Renwick	Lot 1 DP 4579	Renwick Museum and Library
B55	25, 159	Taylor Pass Road, Blenheim	Sec 1 SO 379599	Resource Recovery Centre and Transfer Station
B56	58, 186	Seddon Sewage Treatment Plant SH 1, Seddon	Lot 2 DP 311753	Seddon Sewage Treatment Plant
B57	38, 138	Victoria Domain, Memorial Park, Road Reserve, Urban Residential Land and Riverbed	Pt lagoon, Suffolk Street, Sec 1132 Town of Picton, Sec 2 SO 442853 and Sec 30 Town of Picton	Sewage Pipeline To provide for the laying of an underground sewer for a distance of 950 metres
B58	17, 160	Alabama Road, Riverlands	Lot 1 DP 5727	Sewage Pumping Station
B59	41, 138	Beach Road, Waikawa	Road Reserve	Sewage Pumping Station The construction operation and maintenance of sewerage pump station.
B60	9, 159	Bomford Street, Blenheim	Pt Lot 1 DP 1347	Sewage Pumping Station
B61	9, 159	Budge Street, Blenheim	Lot 1 DP 1351	Sewage Pumping Station

ID No.	Map No.	Site Description	Legal Description	Designation
B62	35, 138	Fishermans Reserve Waikawa Road, Picton	Pt Sec 1242 Town of Picton	Sewage Pumping Station The construction operation and maintenance of sewerage pump station.
B63	10, 159	Gascoigne Street, Blenheim	Lot 1 DP 1350	Sewage Pumping Station
B64	15, 159	George Street, Blenheim	Lot 1 DP 1349	Sewage Pumping Station
B65	9, 10, 159	Lane Street, Blenheim	Lot 1 DP 1348	Sewage Pumping Station
B66	3, 159	McLauchlan Street, Blenheim	Lot 1 DP 2777	Sewage Pumping Station
B67	8, 159	Purkiss Street, Blenheim	Lot 1 DP 2776	Sewage Pumping Station
B68	16, 159	Stuart Street, Blenheim	Pt Sec 46 Opawa SD	Sewage Pumping Station
B69	38, 138	Surrey Street, Picton	Pt Lagoon	Sewage Pumping Station The construction operation and maintenance of sewerage pump station (including overflow storage tanks).
B70	9, 159	Symon Street, Blenheim		Sewage Pumping Station
B71	42, 138	Waikawa Bay Car Park Waikawa Road, Waikawa Bay	Waikawa Bay Carpark	Sewage Pumping Station The construction operation and maintenance of sewerage pump station.
B72	34, 138	Waitohi Domain Dublin Street, Picton	Sec 1277 Town of Picton	Sewage Pumping Station The construction operation and maintenance of sewerage pump station.
B73	57, 135	Havelock Sewage Oxidation Ponds Queen Charlotte Drive, Havelock	Lot 1 DP 7101	Sewage Treatment Plant
B74	83, 160	Spring Creek Sewage Treatment Plant Peninsula Road, Spring Creek	Lot 1 DP 6986	Sewage Treatment Plant

ID No.	Map No.	Site Description	Legal Description	Designation
B75	160	Blenheim Sewage Treatment Plant Hardings Road, Riverlands	Pt Sec 8 Opawa Dist, Pt Sec 2 & 5 Blk I Clifford Bay SD, Pt Sec 25 & 28 Opawa Dist, Lot 1 DP 3199 and Pt Section 24, Blk II Wairau RD	Sewage Treatment Plant - Blenheim
B76	25, 26, 27, 28, 30, 159	Wither Hills Soil Conservation Reserve		Soil Conservation
B77	9, 159	Cnr Bomford and Auckland Streets	Lots 5 and 6 DP 1466	Town Water Supply Treatment
B78	57, 135	Queen Charlotte Drive, Havelock	Pt Lot 1 DP 1247 and Pt Sec 33 Blk XII Wakamarina SD	Transfer Station
B79	122	Ronga Road, Rai Valley	Road Reserve	Transfer Station
B80	58, 186	Seddon Transfer Station	Sec 13 SO 1383	Transfer Station
B81	167	Wairau Valley Transfer Stations Church Lane, Wairau Valley	Lot 1 DP 9728	Transfer Station
B82	59, 219	Ward Transfer Station Cnr Seddon and Carroll Streets, Ward	Lot 1 DP 10250	Transfer Station
B83	25, 159	Wither Road, Blenheim	Lot 617 DP 477801	Transfer Station
B84	138	Picton Transfer Station and Picton Sewerage Treatment Plant Gravesend Place, Picton	Lot 1 DP 12271, Lot 2 DP 7988, Lot 1 DP 3986, Lot 1 DP 3985, Lot 37 DP 337965, Lot 1 DP 11512, Sec 1 SO 7374, and Sec 133 Picton Suburban District	Transfer Station, Leachate and Stormwater Treatment, Sewerage Treatment and Sludge Treatment and Stockpiling.
B85	9, 159	Pitchell Street, Blenheim	Lot 1 & 2 DP 5866	Water Pumping Station
B86	8, 159	Beaver Road, Blenheim	Lot 1 DP 4489	Water Pumping Station
B87	15, 159	Graham Street, Street	Lot 4 DP 7236	Water Pumping Station
B88	54, 160	Malthouse Road, Riverlands	Legal Road	Water Pumping Station
B89	51, 158	River Terrace, Renwick	Lot 1 DP 4652	Water Pumping Station
B90	137	Speeds Road, Koromiko	Sec 161 Picton Suburban Dist, Sec 1 SO 434637	Water Pumping Station
B91	60, 167	Wairau Valley Township	Sec 1 SO 4495, Sec 4 Blk IV Mt Olympus SD	Water Pumping Station
B92	26, 159	Wither Road, Blenheim	Lot 1 DP 329656	Water Pumping Station
B93	51, 158	Terrace Road, Renwick	Lot 1 DP 5238, Lot 1 DP 4652	Water Pumping Station
B94	183, 199	Black Birch, Awatere Valley	Pt Sec 1 Sec 2 Blk XIX Taylor Pass SD, Sec 6 SO 432142	Water Supply Catchment
B95	31, 32, 34, 35, 138	Essons Valley, Picton	Sec 48 Blk XII Linkwater SD, Sec 1 Blk XVI Linkwater SD, Sec 8Blk XVI Linkwater SD	Water Supply Catchment
B96	57, 135	Havelock Water Supply	Sec 2 Sec 5 Blk XII Wakamarina SD, Sections 143 and 149 Havelock Suburban District	Water Supply

ID No.	Map No.	Site Description	Legal Description	Designation
B97	138	The Elevation SH 1, Picton	Lot 1 PD 4438	Water Supply Reservoir
B98	37, 38, 138	Victoria Domain, Picton	Sec 2 SO 442853, Sec 30 Town of Picton	Water Supply Reservoir The construction, operation and maintenance of a potable water storage reservoir and associated infrastructure.
B99	42, 138	Waikawa Reservoir	Lot 9 DP 403169	Water Supply Reservoir
B100	27, 159	Wither Farm, Blenheim	Sec 2 & 8 Blk IV Taylor Pass SD	Water Supply Reservoir
B101	25, 26, 30, 171	Wither Hills Taylor Pass Road, Blenheim	Lot 615 409373 and Lot 630 DP 466163	Water Supply Reservoir
B102	160	Wither Hills, Riverlands	Lot 3 DP 378125	Water Supply Reservoir
B103	7, 159	106-108 Nelson Street, Blenheim	Lot 2 DP 318571	Water Treatment Plant and Town Supply

Minister of Education

ID No.	Map No.	Site Description	Legal Description	Designation
C1	9, 159	Blenheim School Alfred Street, Blenheim	Lot 74 and Pt Lots 75-80 DP 15	Education Purposes
C2	9, 159	Bohally School McLauchlan Street, Springlands, Blenheim	Sec 52 Omaka RD Blk XVI Cloudy Bay SD	Education Purposes
C3	63, 134	Canvastown Primary School SH 6, Canvastown	Sec 1 SO 426938	Education Purposes
C4	86, 158	Fairhall School New Renwick Road, Fairhall	Pt Lot 2 DP 1232 Pt Lot 23 Sec 37 District of Opawa; Lot 2 DP 3694 Blk XVII Cloudy Bay SD	Education Purposes
C5	84, 159, 160	Grovetown School Cnr Fell and Vickerman Streets, Grovetown	Lots 1, 2 and Pt Lot 16 DP 1359 Blk XI Cloudy Bay SD	Education Purposes
C6	57, 135	Havelock School Main Road (SH 6), Havelock	Pt Sec 1 and Secs 2 and 3 SO 4530; Pt Sec 1 SO 7157; Lots 2 and 3 DP 9427	Education Purposes
C7	137	Linkwater School Queen Charlotte Drive, Linkwater	Sec 2 of 15 Blk X Linkwater SD	Education Purposes

ID No.	Map No.	Site Description	Legal Description	Designation
C10	15, 159	Marlborough Boys College Stephenson, Scott and Francis Streets, Whitney, Blenheim	Lots 1-3 DP 1173, Pt DP 383, Pt Lot 448, Lot 2 DP 9150, Pt Lots 2 and 3 DP 448, Pt Lot 1 Deeds Plan 21, Lot 1 DP 8651, Pt Lots 1 and 3 DP 350, Lot 21 DP 195, Lot 2 DP 2220, Lot 1 DP 1497, Lot 5 DP 1489	Education Purposes
C11	9, 159	Marlborough Girls College Cnr McLauchlan and Nelson Streets, Blenheim	Pt Sec 52 Omaka RD Blk XVI Cloudy Bay SD	Education Purposes
C12	4, 159	Mayfield School Hutcheson Street, Mayfield, Blenheim	Pt Sec 50 Wairau RD Blk XVI Cloudy Bay SD	Education Purposes
C13	34, 138	Picton Playcentre Waitohi Place, Picton	Lot 9 DP 4146	Education Purposes
C14	34, 138	Picton School Broadway, Buller, York and Kent Streets, Picton	Secs 627-637 and Sec 1152 Town of Picton	Education Purposes
C15	155	Pine Valley School Pine Valley Road, Northbank	Sec 3 of 2 Blk XVIII Pine Valley SD	Education Purposes
C16	38, 138	Queen Charlotte College Waikawa Road, Picton	Pt Sec 8, Waitohi RD, Pt DP 53	Education Purposes
C17	62, 121, 122	Rai Valley School SH 6, Rai Valley	Pt Lots 1 and 2 DP 776, Pt Lot 1 DP 1234	Education Purposes
C18	159	Rapaura School Hammerichs Road, Rapaura	Lots 1 and 2 DP 1288	Education Purposes
C19	21, 159	Redwoodtown School Cleghorn Street, Redwoodtown, Blenheim	Pt Lots 17-19 and Lots 34-38 DP 17	Education Purposes
C20	53, 158	Renwick School High, Brook and Havelock Streets, Renwick	Pt Sec 163 Wairau RD; Sec 167 Wairau RD; Sec 10 Blk XIII Cloudy Bay SD. Stopped Road.	Education Purposes
C21	17, 159	Riverlands School School Road, Riverlands	Pt Lot 2 DP 1232 Pt Lot 23 Sec 37 District of Opawa; Lot 2 DP 3694 Blk XVII Cloudy Bay SD	Education Purposes
C22	58, 186	Seddon School Newcome, Wakefield (SH 1) and Foster Streets, Seddon	Sec 8 and Pt Sec 1 and 9 Blk XII Town of Seddon	Education Purposes
C23	83, 159, 160	Spring Creek School Ferry Road, Spring Creek	Lot 2 DP 2051, Lots 65 – 72 DP 485, Pt Sec 50 Wairau West RD Blk XI Cloudy Bay SD, and Pt Lot 2 DP 961	Education Purposes

ID No.	Map No.	Site Description	Legal Description	Designation
C24	7, 159	Springlands School Aston Street & Murphys Road, Springlands, Blenheim	Lots 48-52 and Pt Lots 54-56 DP 18 and Sec 1 Blk XVI Cloudy Bay SD	Education Purposes
C25	34, 138	St Joseph's School Cnr Wellington & Otago Streets, Picton	Lot 2 DP 6003	Education Purposes
C26	15, 159	St Marys School Hodson Street, Maxwell Road, Stephenson Street	Pt Sec 249 Omaka RD, Pt Lot 10 DP 3, Pt Lot 406-412 and Lot 602-604 Deeds Plan 15	Education Purposes
C27	80, 149	Tuamarina School Cnr Cotterill St and Campbells Road, Tuamarina	Secs 11, 18 and 19 and Pt Secs 12-15 and 17 Village of Tuamarina. Sec 1 SO 416944	Education Purposes
C28	41, 138	Waikawa Bay School Waikawa Road, Waikawa Bay	Sec 21 Waikawa Village, Maori Blk	Education Purposes
C29	60, 167	Wairau Valley School Morse Street, Wairau Valley	Sec 40 Blk IV Mount Olympus SD	Education Purposes
C30	115	Waitaria Bay School Kenepuru Road, Waitaria Bay	Sec 30 Blk I, Gore SD	Education Purposes
C31	59, 203, 219	Ward School Cfnr Carroll and Duncan Streets, Ward	Sec 14 Blk VII Town of Ward	Education Purposes
C32	14, 159	Whitney Street School Whitney Street, Blenheim	Lots 5-7 and Pt Lot 10 DP 4, Pt Lots 2 and 5 DP 1236, Lot 2 DP 794, Pt Sec 4 Omaka RD	Education Purposes
C33	27, 159	Witherlea School Weld Street, Witherlea, Blenheim	Pt Secs 18 and 19 Blk IV Taylor Pass SD	Education Purposes

Explanation

Education Purposes means:

> *"Includes the provision of instruction and/or training and may include such uses as early childhood education services, schools, community education, tertiary educational institutions, work skills training centres, outdoor education centres, sport training establishments and out of school care services and includes their ancillary administrative and support facilities (including cultural, recreational, communal or accommodation)".*

Meteorological Service of New Zealand Limited

ID No.	Map No.	Site Description	Legal Description	Designation
D1	85, 158	Automatic weather station Blenheim Airport	Blk XIV Cloudy Bay SD – SO 3888	Meteorological Activities
D2	85, 158	Anemometer mast Blenheim Airport	Blk XIV Cloudy Bay SD SO 4482	Meteorological Activities

D3	188	Automatic weather station Adjacent to and within the Cape Campbell Lighthouse.	Blk IV Cape Campbell SD SO 6745	Meteorological Activities
D4	119	Automatic weather station Adjacent to and within the Brothers Island Lighthouse.	Blk XXII Gore SD SO 4903	Meteorological Activities

Marlborough Lines Limited

ID No.	Map No.	Site Description	Legal Description	Designation
E1	83, 159	1256 Rapaura Road, Spring Creek	Lot 1 DP 2435	Substation
E2	55, 160	17 Vernon Street, Riverlands	Lot 1 DP 10794	Substation & Switch Station
E3	56, 160	23 Cloudy Bay Drive, Wither Hills	Lot 4 DP 404704	Substation
E4	157	872 State Highway 63	Lots 1 & 2 DP 470193	Substation
E5	9, 159	Alfred Street, Blenheim	Pt Lot 1 DP 2026 7 & Sec 230 Omaka SD	Administration Building & ROW Access
E6	9, 159	Alfred Street, Blenheim	Lot 3 DP 5473	Substation
E7	9, 159	Arthur Street, Blenheim	Pt Lot 318 DP 78	Substation
E8	86, 158, 159	Bradleigh Park, Blenheim	Lot 7 DP 375994	Substation
E9	15, 159	Cnr Seymour & Francis Streets, Blenheim	Lot 2 DP 4869	Future Substation
E10	51, 158	Cnr SH 63 & Hawkesbury Road, Renwick	Lot 1 & 3 DP 4496	Substation
E11	103	Elaine Bay	Lot 1 DP 8465 (NN)	Substation
E12	58, 186	Fearon Street, Seddon	Lot 1 DP 3464 & Lot 1 DP 7437	Switch Station, Substation & Depot
E13	9, 159	First Lane, Blenheim	Pt Lot 6 DP 3027	Substation
E14	21, 159	Hospital Road, Blenheim	Lot 2 DP 5875	Substation
E15	80, 149	Hunter Road, Tuamarina	Lot 1 DP 4156	Switch Station
E16	97	Kapowai Bay, D'Urville Island	Lot 1 DP 12208 (NN)	Depot
E17	15, 159	Kinross Street, Blenheim	Lot 2 DP 5935	Substation
E18	57, 135	Lawrence Street, Havelock	Lot 1 DP 8631	Depot
E19	34, 138	Market Street, Picton	Lot 2 SP 3221	Depot
E20	9, 159	Nelson Street, Blenheim	Lot 1 & 2 DP 5917	Substation
E21	158	Old Renwick Road	Lot 3 DP 5599	Substation

ID No.	Map No.	Site Description	Legal Description	Designation
E22	2, 159	Old Renwick Road, Blenheim	Pt Lots 5 & Lot 6 DP 401	System control and substation
E23	2, 159	Old Renwick Road, Blenheim	DP 1065	Diesel Generation Station
E24	136	Queen Charlotte Drive, Linkwater	Part of Sec 7S, Linkwater Dale Settlement, Blk IX Linkwater SD	Substation
E25	9, 159	Queen Street, Blenheim	Pt DP 453 & Pt DP 557	Substation
E26	33, 138	Scotland Street, Picton	Lot 1 DP 6309	Substation
E27	59, 203, 219	Seddon Street, Ward	Lot 1 DP 10714	Substation
E28	15, 159	Seymour Street, Blenheim	Pt Lot 582 DP 804 & Pt Lot 1 DP 1727	Substation
E29	135	SH 6, Havelock	Lot 1 DP 3649	Substation
E30	62, 121	SH 6, Rai Valley	Lot 1 DP 3771 (NN)	Substation
E31	19, 20, 25, 159	Taylor Pass Road, Blenheim	Lot 1 DP 4054 Pt Sec 24 Blk III and Sec 32, 33 Blk III Taylor Pass SD	Industrial Park
E32	169	Waihopai Valley Road	Lot 1 DP 806	Substation
E33	9, 159	Wynen Street, Blenheim	Lot 1 DP 5923	Substation

Airways Corporation of New Zealand Limited

ID No.	Map No.	Site Description	Legal Description	Designation
F1	130	Arapawa Island. Near Narawhia Trig, South East corner of Arapawa Island	Lot 1 DP 8821	Air Navigation Aid (very high frequency Omni-Directional Radio Range and Distance Measuring Equipment Station).
F2	138	Mt Robertson	Part of Sec 1 & 2 SO 426595	Air Navigation Aid

Conditions:

The height of any structure on the Mr Robertson site shall be no greater than 30 metres.

Kordia Limited

ID No.	Map No.	Site Description	Legal Description	Designation
G1	139	Kahikatea Saddle	Sec 15 Blk XII, Sec 2 Sec 6A Blk VIII Arapawa SD	Telecommunications and Broadcasting
G2	132	Maungatapu Saddle	Pt Blk III Maunatapu SD, Mount Richmond Forest Park.	Telecommunications and Broadcasting
G3	219	Weld Cone	Pt Lot 1 DP 8409	Telecommunications and Broadcasting
G4	29, 160	Wither Hills	Lot 1 DP 2833	Telecommunications and Broadcasting

Maritime New Zealand

ID No.	Map No.	Site Description	Legal Description	Designation
H1	119	Brothers Island	Crown Land Blk XXII Gore SD	Lighthouse & Nature Reserve
H2	188	Cape Campbell	Sec 1 SO 6745	Lighthouse, Landcorp Investment Ltd
H3	109	Cape Jackson	Sec 1 Blk XX Gore SD	Lighthouse
H4	97	Channel Point (French Pass)	Sec 13 SQ 93	Lighthouse & Nature Reserve
H5	97	Middle Bank Reef (French Pass)	N/A	Lighthouse
H6	99	Ninepin Rock	Nature Reserve Blk XXVI Gore SD	Lighthouse
H7	88	Stephens Island	Sec 1 SO 15162	Lighthouse and Wildlife Sanctuary

Spark New Zealand Trading Limited

ID No.	Map No.	Site Description	Legal Description	Designation
I1	140	Rahotia Microwave Station Hitaua Bay	Pt Secs 12 and 27 Blk IX and Pt Secs 9 and 32 Blk XIII Arapawa SD and Pt Hitaua Z2 Blk	Telecommunications and Radio Communications and Ancillary Purposes
I2	52, 158	Renwick Exchange High Street, Renwick	Sec 2 SO 6760	Telecommunications and Radio Communications and Ancillary Purposes (Note: Primary designation to Chorus New Zealand Limited)
I3	172	Vernon Telepaging/Land Mobile Station South West Blenheim / Wither Hills	Lot 1 DP 2833	Telecommunications and Radio Communications and Ancillary Purposes

Conditions:

Rahotia Microwave Station Vernon Telepaging/Land Mobile Station

Height – Masts and Antennas

1. That the height of any mast and associated antennas (excluding any lightening rod) shall not exceed 25m.

2. Notwithstanding Condition 1, any antennas and associated equipment on the tower at the Weld Cone Microwave/Land Mobile Station site existing on 30 November 2011 that exceeds the height limit for new masts and antennas, may be upgraded, reconfigured or additional antennas installed subject to there being no increase in the overall height of the mast and attached antennas.

3. Antennas mounted on the roof of buildings shall not extend more than 5m above the maximum height of the roof of any existing building.

Buildings

4. Any buildings, excluding masts, exhaust flues, antennas and air conditioning equipment shall not exceed a maximum building height of 10 metres. For the avoidance of doubt, building height means the vertical distance between ground level at any point and the highest part of the building immediately above that point.

5. For the avoidance of doubt, building height may be measured by either a rolling height method, or average height of the periphery of the building, whichever is the greater.

6. Except this shall not restrict the maintenance, upgrading and replacement of any existing building where it infringes this condition provided there is no additional exceedance of the standards with this condition.

Noise

7. Any new noise generating equipment (excluding any engine alternator required for emergency backup power generation) shall not exceed the following noise limits at a notional boundary 20m from the façade of any dwelling, or the site boundary, whichever is the closer to the dwelling:

   7.00 am – 10.00 pm on any day: Leq 55 dBA

   10.00 pm – 7.00 am on any day: Leq 45 dBA

8. Where existing site noise already exceeds the levels in condition 5 above, that any new noise generating equipment (excluding any engine alternator required for emergency backup power generation and/or load shedding) shall cumulatively in combination with any other noise generating equipment on the site not result in any increase in existing noise levels received at any other property boundary. A noise assessment may need to be submitted as part of any outline plan (depending on circumstances such as the nature of the noise generating equipment, remoteness of the site, and proximity to boundaries) to confirm the existing noise levels and predicted new noise levels to confirm compliance with this condition.

9. For any new engine alternator required for emergency backup power generation and/or load shedding that exceeds the noise limits is Condition 5 above, that an outline plan shall be required that demonstrates how the equipment and any mitigation is the best practicable option (BPO) to ensure that noise levels do not exceed a reasonable level.

Radiofrequency Exposures

10. That all equipment transmitting radio frequency energy shall comply with the limits for public exposure in New Zealand Standard NZS2772.1:1999 at any place where the public has reasonable access.

Outline Plans

11. That no outline plan shall be required for any internal building works that do not result in any increases in noise emissions, or for the replacement of any antennas with antennas of similar size provided that there is no overall increase in the overall height of the facility.

Renwick Exchange

Height – Masts and antennas

1. That the height of any mast and associated antennas (excluding any lightening rod) shall not exceed 15m.

2. Any new mast and associated antennas shall comply with the relevant height in relation to boundary controls from adjoining residential boundaries as included in the Marlborough Resource Management District Plan as at 30 November 2011.

3. Notwithstanding Condition s 1 and 2, any antennas and associated equipment on the mast on the Renwick Exchange site existing on 30 November 2011 that exceeds the height limit for new masts and antennas, may be upgraded, reconfigured or additional antennas installed subject to there being no increase in the overall height of the mast and attached antennas.

4. Antennas mounted on the roof of buildings shall not extend more than 3m above the maximum height of the roof of any existing building.

Buildings

5. Any buildings, excluding masts, exhaust flues, antennas and air conditioning equipment shall not exceed a maximum building height of 10 metres. For the avoidance of doubt, building height means the vertical distance between ground level at any point and the highest part of the building immediately above that point.

   Except this shall not restrict the maintenance, upgrading and replacement of any existing building where it infringes this condition provided there is no additional exceedance of the standards with this condition.

Noise

6. Any new noise generating equipment (excluding any engine alternator required for emergency backup power generation) shall not exceed the following noise limits at a notional boundary 20m from the façade of any dwelling, or the site boundary, whichever is the closer to the dwelling:

   7.00 am – 10.00 pm on any day Leq 50dBA

   10.00 pm – 7.00 am on any day: Leq 40dBA.

7. Where existing site noise already exceeds the levels in condition 6 above, that any new noise generating equipment (excluding any engine alternator required for emergency backup power generation and/or load shedding) shall cumulatively in combination with any other noise generating equipment on the site not result in any increase in existing noise levels received at any other property boundary. A noise assessment may need to be submitted as part of any outline plan (depending on circumstances such as the nature of the noise generating equipment, remoteness of the site, and proximity to boundaries) to confirm the existing noise levels and predicted new noise levels to confirm compliance with this condition.

8. For any new engine alternator required for emergency backup power generation and/or load shedding that exceeds the noise limits is Condition 6 above, that an outline plan shall be required that demonstrates how the equipment and any mitigation is the best practicable option (BPO) to ensure that noise levels do not exceed a reasonable level.

Radiofrequency Exposures

9. That all equipment transmitting radio frequency energy shall comply with the limits for public exposure in New Zealand Standard NZS2772.1:1999 at any place where the public has reasonable access.

Outline Plans

10. That no outline plan shall be required for any internal building works that do not result in any increases in noise emissions, or for the replacement of any antennas with

antennas of similar size provided that there is no overall increase in the overall height of the facility. Chorus New Zealand Limited

Chorus New Zealand Limited

ID No.	Map No.	Site Description	Legal Description	Designation
J1	199	Black Birch Range Land Mobile Station Black Birch Observatory Site	Pt Sec 1 Blk XIX Taylor Pass SD and Pt Run 16B	Telecommunications and Radio Communications and Ancillary Purposes
J2	9, 159	Blenheim Exchange Main Street, Blenheim	Sec 2 & 3 SO 6756	Telecommunications and Radio Communications and Ancillary Purposes
J3	16, 159	Blenheim Microwave Station Timandra Place, Blenheim	Lot 16 DP 305341	Telecommunications and Radio Communications and Ancillary Purposes
J4	173	Dashwood Microwave Station North East of SH 1 / Redwood Pass Road Intersection	Lot 1 DP 10843	Telecommunications and Radio Communications and Ancillary Purposes
J5	57, 135	Havelock Exchange SH 6, Havelock	Lot 1 DP 8826	Telecommunications and Radio Communications and Ancillary Purposes
J6	173	Jamies Knob Microwave Station Cnr Redwood Pass Road	Pt Sec 7 Blk 1 Wakefield Downs Registration District	Telecommunications and Radio Communications and Ancillary Purposes
J7	126	Lochmara Bay Exchange Lochmara Bay	Lot 26 DP 3399	Telecommunications and Radio Communications and Ancillary Purposes
J8	34, 138	Picton Exchange Cnrs Dublin, Wellington and High Streets, Picton	Sec 2 SO 6764	Telecommunications and Radio Communications and Ancillary Purposes
J9	See I1 Map 140	Rahotia Microwave Hitaua Bay	Pt Secs 12 and 27 Blk IX and Pt Secs 9 and 32 Blk XIII Arapawa SD and Pt Hitaua Z2 Blk	Telecommunications and Radio Communications and Ancillary Purposes
J10	62, 121, 122	Rai Valley Exchange SH 6, Rai Valley	Sec 2 So 6759	Telecommunications and Radio Communications and Ancillary Purposes
J11	See I2 Maps 52 & 158	Renwick Exchange High Street, Renwick	Sec 2 So 6760	Telecommunications and Radio Communications and Ancillary Purposes
J12	58, 186	Seddon Exchange 4 Richmond Street, Seddon	Secs 1 & 2 SO 6761	Telecommunications and Radio Communications and Ancillary Purposes
J13	83, 159	Spring Creek Exchange Ferry Road, Spring Creek	Pt Lot 93 Deeds Plan 12	Telecommunications and Radio Communications and Ancillary Purposes
J14	135	Takorika Microwave Station Above Havelock	Lot a DP 7937 and Pt Sec 2 of Blk XII Wakamarina SD	Telecommunications and Radio Communications and Ancillary Purposes
J15	See I3	Vernon Telepaging / Land	Lot 1 DP 2833	Telecommunications and

ID No.	Map No.	Site Description	Legal Description	Designation
	Map 172	Mobile Station South West Blenheim / Wither		Radio Communications and Ancillary Purposes
J16	59, 219	Ward Exchange Seddon Street, Ward	Sec 5 Blk IX Town of Ward	Telecommunications and Radio Communications and Ancillary Purposes
J17	219	Ward Microwave Station South East of Ward	Section 1 So 6530	Telecommunications and Radio Communications and Ancillary Purposes
J18	219	Weld Cone Microwave / Land Mobile Station Weld Cone, South West of Ward Township	Sec 2 SO 6530	Telecommunications and Radio Communications and Ancillary Purposes

Conditions:

Blenheim Exchange

Blenheim Microwave Station

Height – Masts and antennas

1. That the height of any mast or tower and associated antennas (excluding any lightening rod) on the Blenheim Exchange site shall not exceed 20m, and on the Blenheim Microwave Station site shall not exceed 25m.

2. Antennas mounted on the roof of buildings shall not extend more than 5m above the maximum height of the roof of any existing building.

Noise

3. Any new noise generating equipment (excluding any engine alternator required for emergency backup power generation) shall not exceed the following noise limits:

   <u>At the boundary of any other site zoned Central Business or Industrial</u>

   7.00 am – 10.00 pm on any day: Leq 65dBA

   10.00 pm – 7.00 am on any day: Leq 60dBA.

4. Where existing site noise already exceeds the levels in condition 4 above, that any new noise generating equipment (excluding any engine alternator required for emergency backup power generation and/or load shedding) shall cumulatively in combination with any other noise generating equipment on the site not result in any increase in existing noise levels received at any other property boundary. A noise assessment may need to be submitted as part of any outline plan (depending on circumstances such as the nature of the noise generating equipment, remoteness of the site, and proximity to boundaries) to confirm the existing noise levels and predicted new noise levels to confirm compliance with this condition.

5. For any new engine alternator required for emergency backup power generation and/or load shedding that exceeds the noise limits is Condition 4 above, that an outline plan shall be required that demonstrates how the equipment and any mitigation is the best practicable option (BPO) to ensure that noise levels do not exceed a reasonable level.

Radiofrequency Exposures

6. That all equipment transmitting radio frequency energy shall comply with the limits for public exposure in New Zealand Standard NZS2772.1:1999 at any place where the public has reasonable access.

Outline Plans

7. That no outline plan shall be required for any internal building works that do not result in any increases in noise emissions, or for the replacement of any antennas with antennas of similar size provided that there is no overall increase in the overall height of the facility.

Havelock Exchange

Picton Exchange

Renwick Exchange

Rai Valley Exchange

Height – Masts and Antennas

1. That the height of any mast and associated antennas (excluding any lightening rod) shall not exceed 15m.

2. Any new mast and associated antennas shall comply with the relevant height in relation to boundary controls from adjoining residential boundaries as included in the Marlborough Resource Management District Plan as at 30 November 2011.

3. Notwithstanding Condition s 1 and 2, any antennas and associated equipment on the mast on the Renwick Exchange site existing on 30 November 2011 that exceeds the height limit for new masts and antennas, may be upgraded, reconfigured or additional antennas installed subject to there being no increase in the overall height of the mast and attached antennas.

4. Antennas mounted on the roof of buildings shall not extend more than 3m above the maximum height of the roof of any existing building.

Buildings

5. Any buildings, excluding masts, exhaust flues, antennas and air conditioning equipment shall not exceed a maximum building height of 10 metres. For the avoidance of doubt, building height means the vertical distance between ground level at any point and the highest part of the building immediately above that point.

   Except this shall not restrict the maintenance, upgrading and replacement of any existing building where it infringes this condition provided there is no additional exceedance of the standards with this condition.

Noise

6. Any new noise generating equipment (excluding any engine alternator required for emergency backup power generation) shall not exceed the following noise limits at a notional boundary 20m from the façade of any dwelling, or the site boundary, whichever is the closer to the dwelling:

   7.00 am – 10.00 pm on any day Leq 50dBA

   10.00 pm – 7.00 am on any day: Leq 40dBA.

7. Where existing site noise already exceeds the levels in condition 6 above, that any new noise generating equipment (excluding any engine alternator required for emergency backup power generation and/or load shedding) shall cumulatively in combination with any other noise generating equipment on the site not result in any increase in existing noise levels received at any other property boundary. A noise assessment may need to be submitted as part of any outline plan (depending on circumstances such as the nature of the noise generating equipment, remoteness of the site, and proximity to boundaries) to confirm the existing noise levels and predicted new noise levels to confirm compliance with this condition.

8. For any new engine alternator required for emergency backup power generation and/or load shedding that exceeds the noise limits is Condition 6 above, that an outline plan shall be required that demonstrates how the equipment and any mitigation is the best practicable option (BPO) to ensure that noise levels do not exceed a reasonable level.

Radiofrequency Exposures

9. That all equipment transmitting radio frequency energy shall comply with the limits for public exposure in New Zealand Standard NZS2772.1:1999 at any place where the public has reasonable access.

Outline Plans

10. That no outline plan shall be required for any internal building works that do not result in any increases in noise emissions, or for the replacement of any antennas with antennas of similar size provided that there is no overall increase in the overall height of the facility. Chorus New Zealand Limited

Spring Creek Exchange

Ward Exchange

Seddon Exchange

Lochmara Bay Exchange

Height – Masts and antennas

1. That the height of any mast and associated antennas (excluding any lightening rod) shall not exceed 15m.

2. Any new mast and associated antennas shall comply with the relevant height in relation to boundary controls from adjoining residential boundaries as included in the Marlborough Resource Management District Plan as at 30 November 2011.

3. Antennas mounted on the roof of buildings shall not extend more than 3m above the maximum height of the roof of any existing building.

Buildings

4. Any buildings, excluding masts, exhaust flues, antennas and air conditioning equipment shall not exceed a maximum building height of 7.5 metres. For the avoidance of doubt, building height means the vertical distance between ground level at any point and the highest part of the building immediately above that point.

Except this shall not restrict the maintenance, upgrading and replacement of any existing building where it infringes this condition provided there is no additional exceedance of the standards with this condition.

Noise

5. Any new noise generating equipment (excluding any engine alternator required for emergency backup power generation) shall not exceed the following noise limits:

   At the boundary of any Residential Zoned Land

   7.00 am – 10.00 pm on any day Leq 50dBA

   10.00 pm – 7.00 am on any day: Leq 40dBA.

6. Where existing site noise already exceeds the levels in condition 6 above, that any new noise generating equipment (excluding any engine alternator required for emergency backup power generation and/or load shedding) shall cumulatively in combination with any other noise generating equipment on the site not result in any increase in existing noise levels received at any other property boundary. A noise assessment may need to be submitted as part of any outline plan (depending on circumstances such as the nature of the noise generating equipment, remoteness of the site, and proximity to boundaries) to confirm the existing noise levels and predicted new noise levels to confirm compliance with this condition.

7. For any new engine alternator required for emergency backup power generation and/or load shedding that exceeds the noise limits is Condition 6 above, that an outline plan shall be required that demonstrates how the equipment and any mitigation is the best practicable option (BPO) to ensure that noise levels do not exceed a reasonable level.

Radiofrequency Exposures

8. That all equipment transmitting radio frequency energy shall comply with the limits for public exposure in New Zealand Standard NZS2772.1:1999 at any place where the public has reasonable access.

Outline Plans

9. That no outline plan shall be required for any internal building works that do not result in any increases in noise emissions, or for the replacement of any antennas with antennas of similar size provided that there is no overall increase in the overall height of the facility.

Rahotia Microwave Station

Jamies Knob Microwave Station

Dashwood Microwave Station

Ward Microwave Station

Weld Cone Microwave/Land Mobile Station

Black Birch Range Land Mobile Station

Vernon Telepaging/Land Mobile Station

Takorika Microwave Station

Height – Masts and antennas

1. That the height of any mast and associated antennas (excluding any lightening rod) shall not exceed 25m.

2. Notwithstanding Condition 1, any antennas and associated equipment on the tower at the Weld Cone Microwave/Land Mobile Station site existing on 30 November 2011 that exceeds the height limit for new masts and antennas, may be upgraded,

reconfigured or additional antennas installed subject to there being no increase in the overall height of the mast and attached antennas.

3. Antennas mounted on the roof of buildings shall not extend more than 5m above the maximum height of the roof of any existing building.

Buildings

4. Any buildings, excluding masts, exhaust flues, antennas and air conditioning equipment shall not exceed a maximum building height of 10 metres. For the avoidance of doubt, building height means the vertical distance between ground level at any point and the highest part of the building immediately above that point.

5. For the avoidance of doubt, building height may be measured by either a rolling height method, or average height of the periphery of the building, whichever is the greater.

   Except this shall not restrict the maintenance, upgrading and replacement of any existing building where it infringes this condition provided there is no additional exceedance of the standards with this condition.

Noise

6. Any new noise generating equipment (excluding any engine alternator required for emergency backup power generation) shall not exceed the following noise limits at a notional boundary 20m from the façade of any dwelling, or the site boundary, whichever is the closer to the dwelling:

   7.00 am – 10.00 pm on any day: Leq 55 dBA

   10.00 pm – 7.00 am on any day: Leq 45 dBA

7. Where existing site noise already exceeds the levels in condition 5 above, that any new noise generating equipment (excluding any engine alternator required for emergency backup power generation and/or load shedding) shall cumulatively in combination with any other noise generating equipment on the site not result in any increase in existing noise levels received at any other property boundary. A noise assessment may need to be submitted as part of any outline plan (depending on circumstances such as the nature of the noise generating equipment, remoteness of the site, and proximity to boundaries) to confirm the existing noise levels and predicted new noise levels to confirm compliance with this condition.

8. For any new engine alternator required for emergency backup power generation and/or load shedding that exceeds the noise limits is Condition 5 above, that an outline plan shall be required that demonstrates how the equipment and any mitigation is the best practicable option (BPO) to ensure that noise levels do not exceed a reasonable level.

Radiofrequency Exposures

9. That all equipment transmitting radio frequency energy shall comply with the limits for public exposure in New Zealand Standard NZS2772.1:1999 at any place where the public has reasonable access.

Outline Plans

10. That no outline plan shall be required for any internal building works that do not result in any increases in noise emissions, or for the replacement of any antennas with antennas of similar size provided that there is no overall increase in the overall height of the facility.

New Zealand Railways Corporation

ID No.	Map No.	Site Description	Legal Description	Designation
K1	Numerous	Picton Terminal and Main North Railway	Railway Land	Railway Purposes

Explanation:

Railway Purposes:

The operation, enhancement and maintenance of the railway network through the Marlborough District to support rail passenger services and freight logistics. The rail corridor consists of the Main North Line.

New Zealand Transport Agency

ID No.	Map No.	Site Description	Legal Description	Designation
L1	Numerous	State Highway 1		State Highway Purposes
L2	Numerous	State Highway 6		State Highway Purposes
L3	158, 159	State Highway 62 (Rapaura Road)		State Highway Purposes
L4	Numerous	State Highway 63		State Highway Purposes

Explanation:

Description of State Highway Purposes:

To control, manage and improve the state highway network including planning, design, research, construction and maintenance relating to all land within the designation. Such activities may involve realigning the road, altering its physical configuration, culverts, bridges and associated protection works.

Minister of Police

ID No.	Map No.	Site Description	Legal Description	Designation
M1	57, 135	Lucknow Street, Havelock	Sec 1 SO 7063, CT 5A/1368 and Conveyance 5866 DR C4/149 (ROW), SO 7063	Police Station and Associated Residence
M2	34, 138	32-36 Broadway, Picton	Lots 1 & 3 DP 8811	Police Station
M3	9, 15, 159	8 Main Street, Blenheim	Pt Lot 1 DP 430 & Sec 98 Blk XVI Cloudy Bay SD	Police Station
M4	52, 158	65A High Street, Renwick	Lot 2 DP 9366 CT 5C/281	Community Policing Centre

Minister of Courts

ID No.	Map No.	Site Description	Legal Description	Designation
N1	9, 159	Blenheim Courthouse Cnr Alfred & Seymour Streets, Blenheim	Sec 40 SO 1640	Courthouse

Transpower

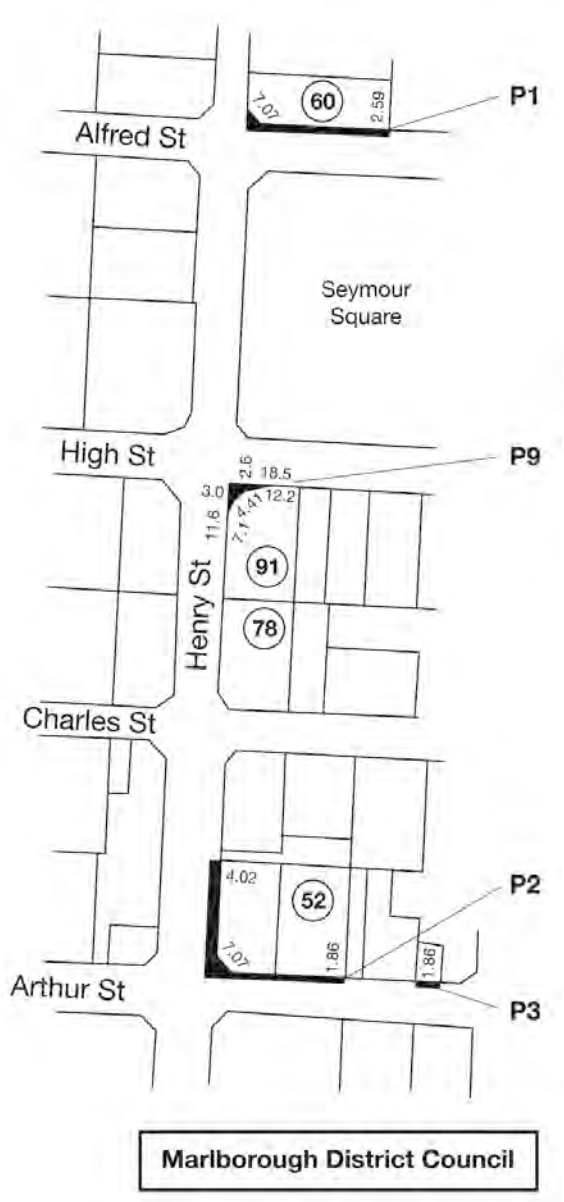
ID No.	Map No.	Site Description	Legal Description	Designation
O1	2, 159	Cnr Thomsons Ford Road and Old Renwick Road	Sec 1 So 4246, Pt Sec 1 SO 6959, Lot 1 DP 8572	Substation
O2	140	Fighting Bay	Sec 88 SO 5086, Sec 1 SO 4679	A high voltage direct current cable, Terminal Station

Marlborough District Council - Schedule of Road Widening

ID No.	Map No.	Site Description	Legal Description	Designation
P1	9	60 Alfred Street, Blenheim	Lot 132 Deeds 15	Road Widening
P2	9	Cnr Arthur Street & Henry, Blenheim	Lots 315 and 316 DP 78	Road Widening
P3	9	32 Arthur Street, Blenheim	Pt Lot 318 DP 78	Road Widening
P4	9, 10	38 Budge Street, Blenheim	Pt Lot 56 Deeds 8	Road Widening
P5	9	38 Charles Street, Blenheim	Pt Lot 103 DP 353	Road Widening
P6	84	17 Fell Street, Grovetown	Lot 10 Sec 38 Wairau West District	Road Widening
P7	4, 9	79 Grove Road, Blenheim	Lot 44 and Pt Lot 45 Deeds 8	Road Widening Marlborough District Council & New Zealand Transport Agency
P8	4	81 Grove Road, Blenheim	Lot 2 DP 6215	Road Widening Marlborough District Council & New Zealand Transport Agency
P9	9	91 High Street, Blenheim	Lot 1 DP 9813	Road Widening
P10	8	207 High Street, Blenheim	Lot 5 DP 341	Road Widening
P11	14	98 Maxwell Road, Blenheim	Pt Lot 8 DP 8	Road Widening
P12	7	172 Middle Renwick Road, Blenheim	Lot 1 DP 1881	Road Widening Marlborough District Council & New Zealand Transport Agency
P13	7	52 Murphys Road, Blenheim	Lot 1 DP 1024	Road Widening
P14	9	9 Nelson Street, Blenheim	Lot 482 DP 309	Road Widening Marlborough District Council & New Zealand Transport Agency
P15	159	Cnr New Renwick Road & Bells Road	Lot 1 DP 354997	Road Widening
P16	19	40 New Renwick Road, Blenheim	Pt Sec 8 Omaka District	Road Widening

ID No.	Map No.	Site Description	Legal Description	Designation
P17	159	173 New Renwick Road, Blenheim	Pt Sec 30 Omaka District	Road Widening
P18	86	New Renwick Road, Fairhall	Lot 6 DP 342799	Road Widening
P19	159	338 New Renwick Road, Fairhall	Lot 8 DP 354997	Road Widening
P20	159	354 New Renwick Road, Fairhall	Pt Sec 18 Wairau District	Road Widening
P21	159	375 New Renwick Road, Fairhall	Pt Sec 38 Omaka District	Road Widening
P22	159	384 New Renwick Road, Fairhall	Lot 1 and 2 DP 1239, Pt Sec 20 Omaka District	Road Widening
P23	159	404 New Renwick Road, Fairhall	Pt Sec 20 Omaka District	Road Widening
P24	3	Old Renwick Road, Blenheim	Pt Sec 67 Omaka District	Road Widening
P25	3, 4	Old Renwick Road, Blenheim	Lot 11 DP 356885	Road Widening

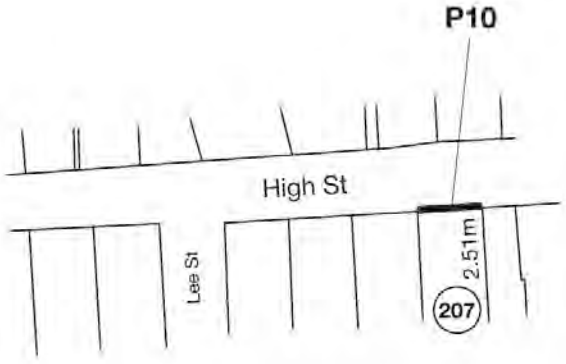
Road Widening Diagrams




Fell St
P6
7.07
17
2.51m
Vickerman St
Grovetown Primary School
Marlborough District Council

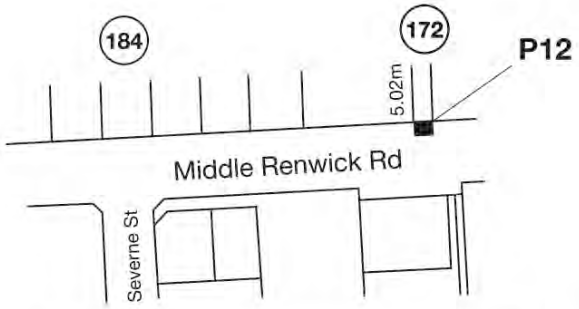

Market St
High St
Seymour St
38
2.26m
Queen St
P5
Charles St
Marlborough District Council


P8
2.51m
81
7.07m
Lansdowne St
77
2.51m
Grove Rd
P7
New Zealand Transport Agency

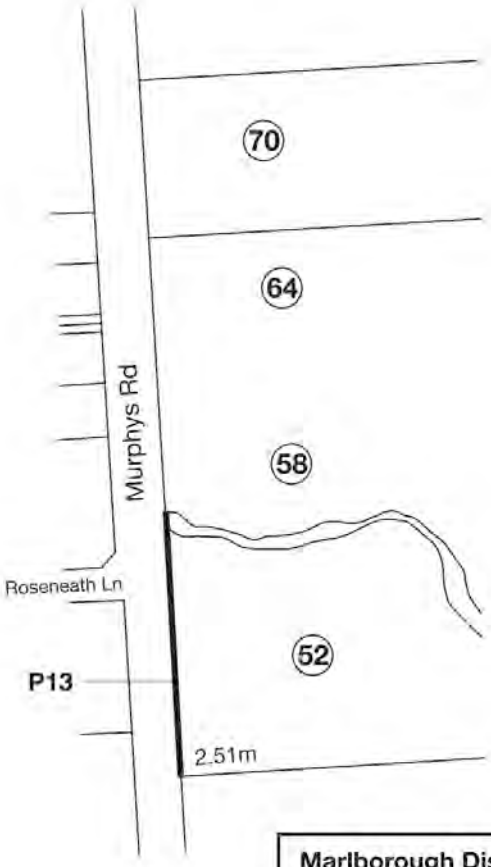


Marlborough District Council

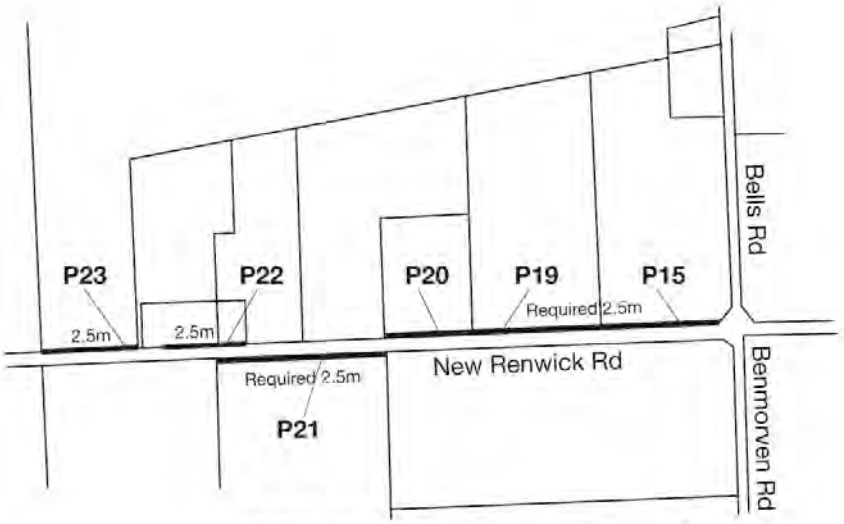
Marlborough District Council



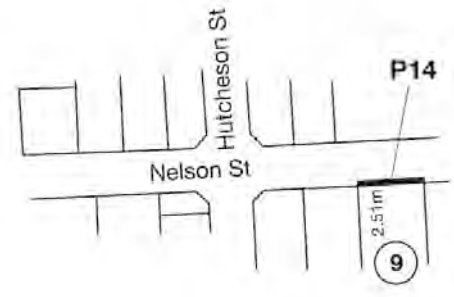
New Zealand Transport Agency



Marlborough District Council

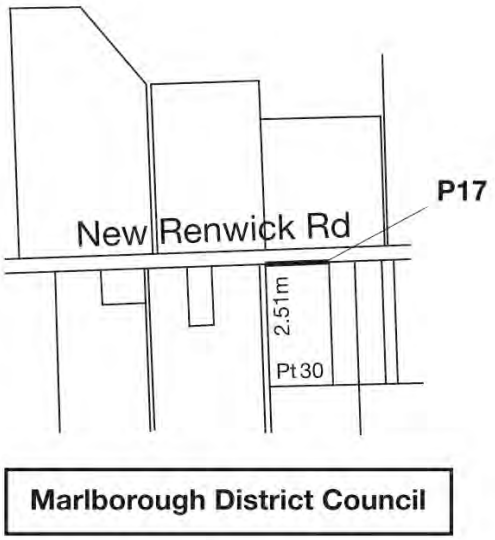


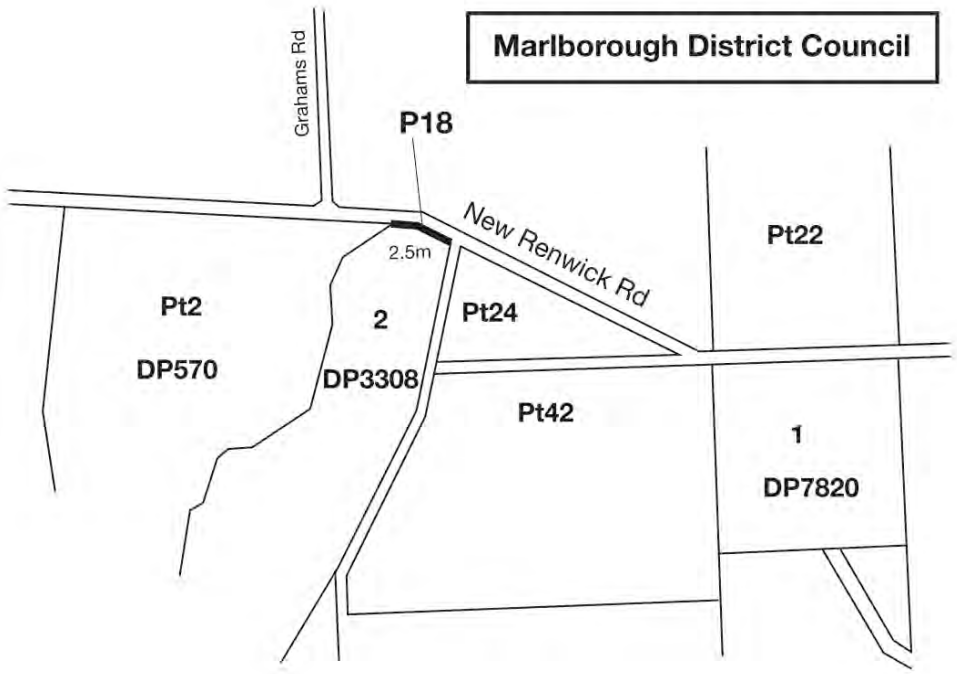
Marlborough District Council

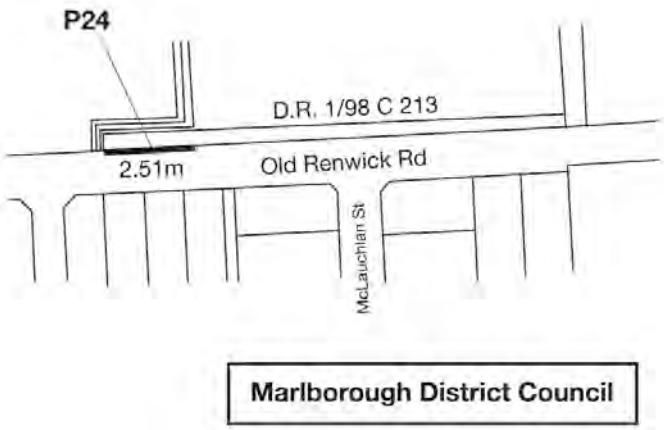


New Zealand Transport Agency

Marlborough District Council


New Renwick Rd
P17
2.51m
Pt 30
Marlborough District Council


Marlborough District Council
Grahams Rd
P18
New Renwick Rd
2.5m
Pt2
DP570
2
DP3308
Pt24
Pt22
Pt42
1
DP7820


P24
D.R. 1/98 C 213
2.51m
Old Renwick Rd
McLauchlan St
Marlborough District Council


Old Renwick Rd
Waterlea Racecourse
2.51m
P25
Marlborough District Council
Waipuna St

Appendix 15

Obstacle Limitation Surfaces

1. Picton Airport Obstacle Limitation Surfaces

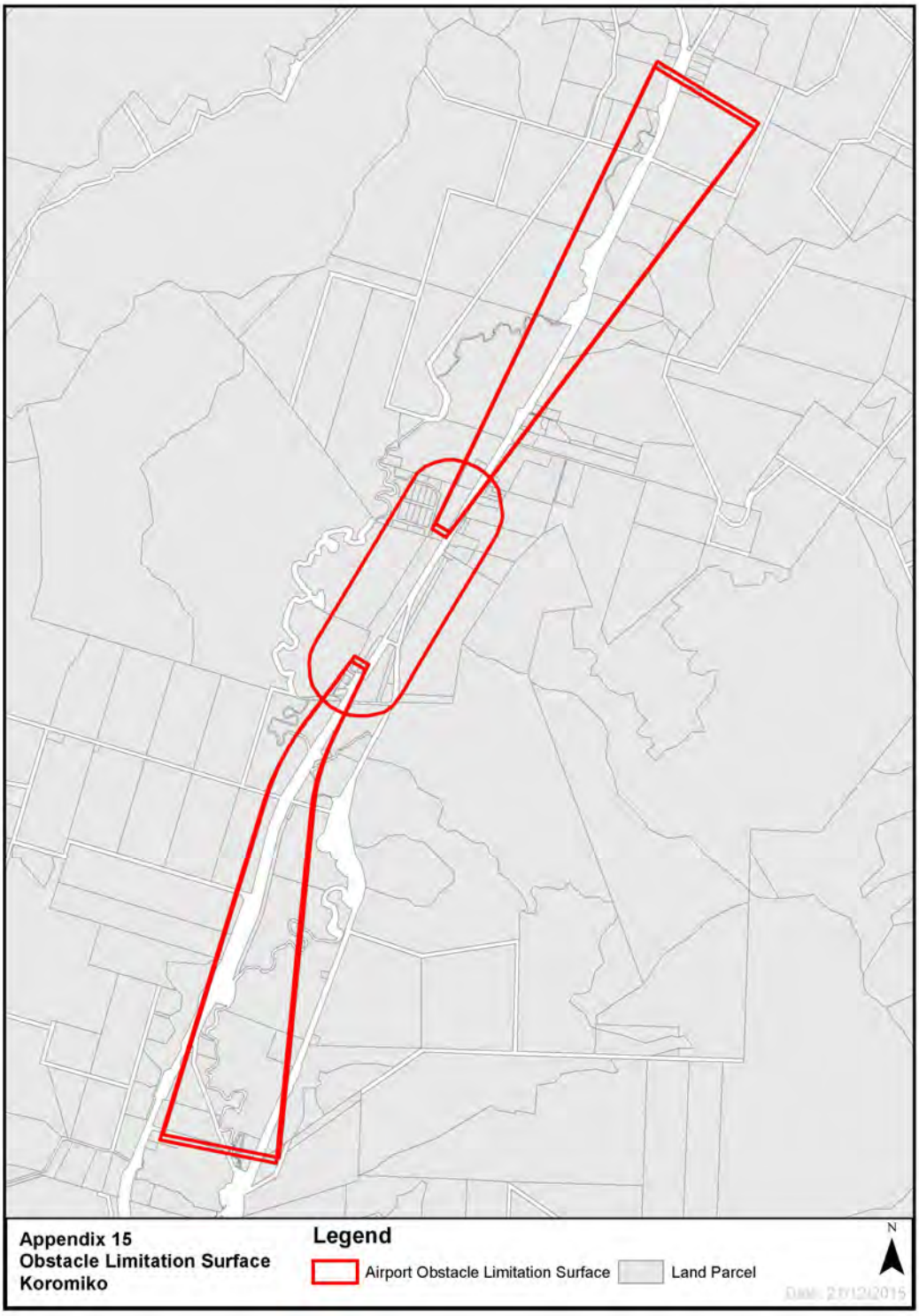


Figure 1: Obstacle Limitation Surfaces

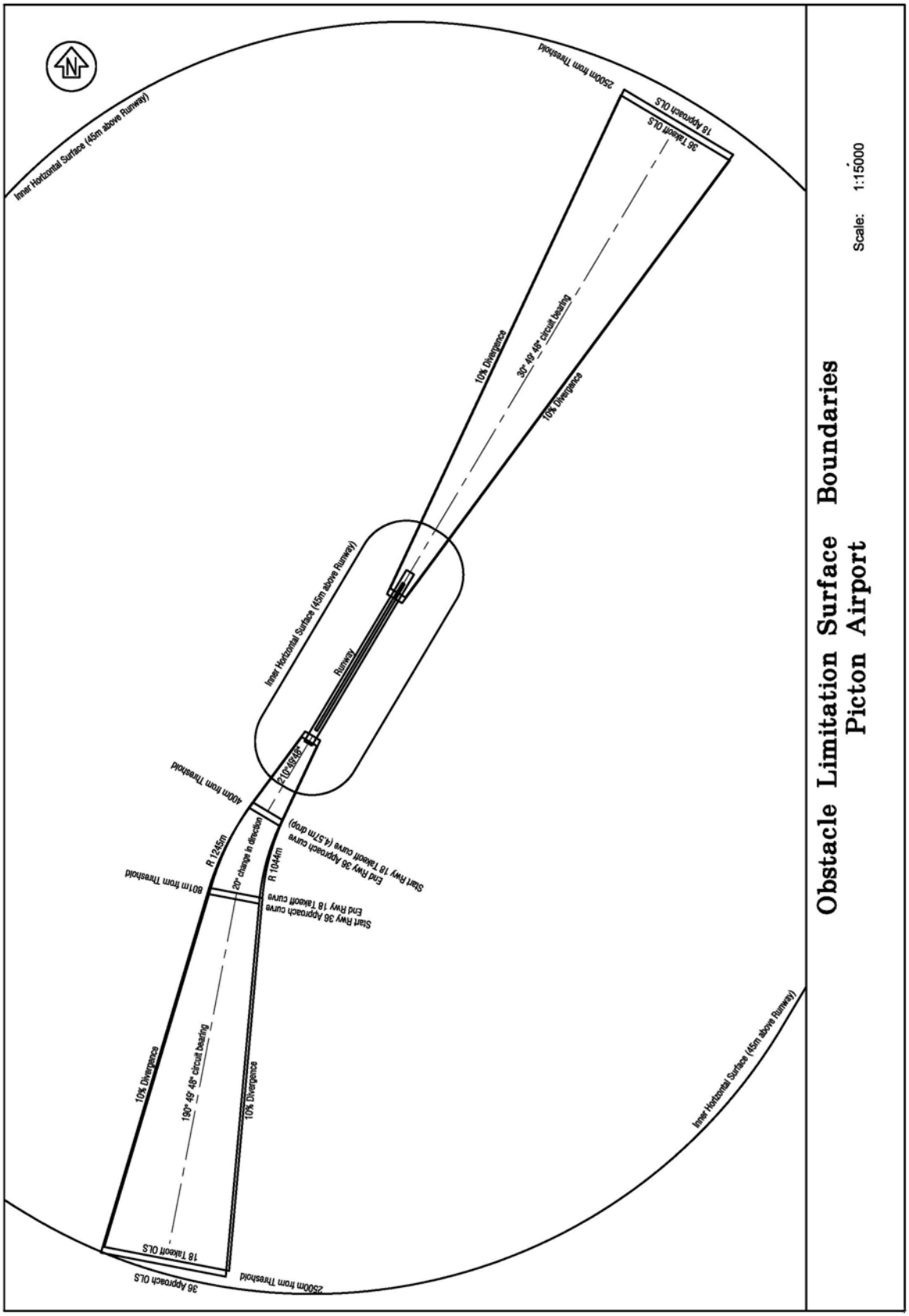


Figure 2: Picton Airport Obstacle Limitation Surface Boundaries Plan View

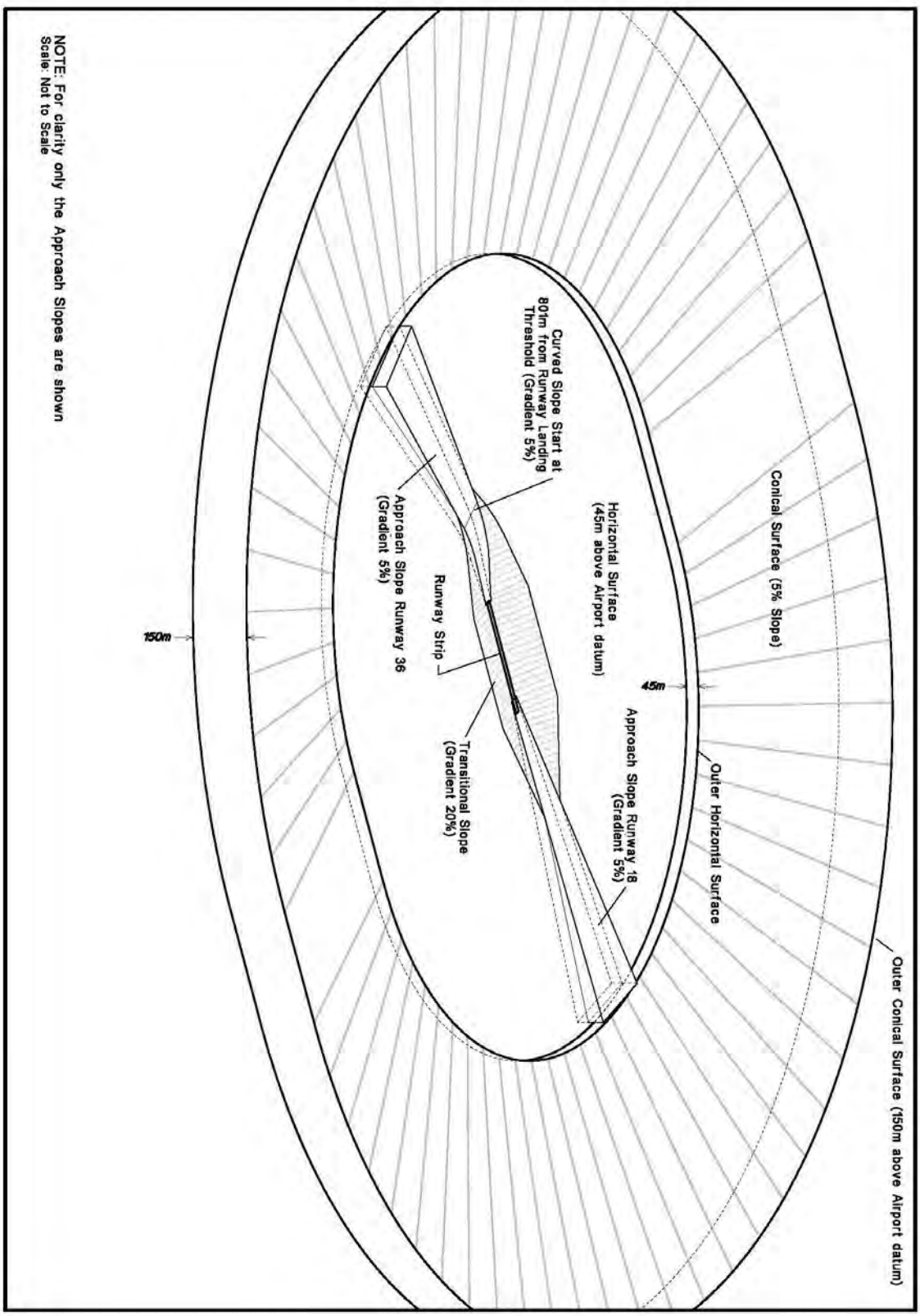


Figure 3: 3D Pictorial view of Obstacle Limitation Surfaces for Picton Airport

Note: This diagram is a 3D pictorial view to assist with application of the obstacle limitation surfaces.
- For clarity only the approach slope is shown.
- The diagram is not to scale.

2. Omaka Aerodrome Obstacle Limitation Surfaces

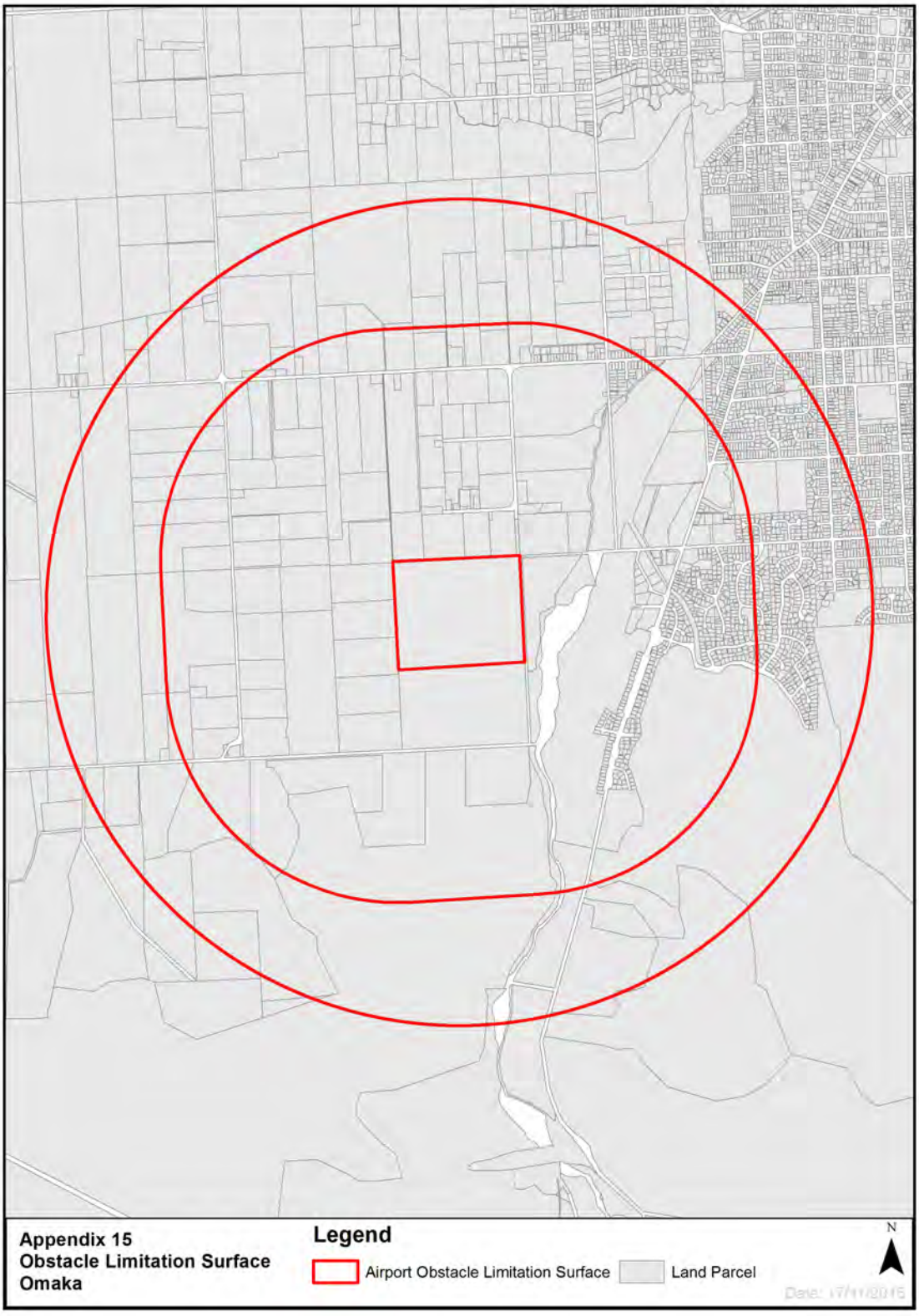


Figure 4: Obstacle Limitation Surfaces

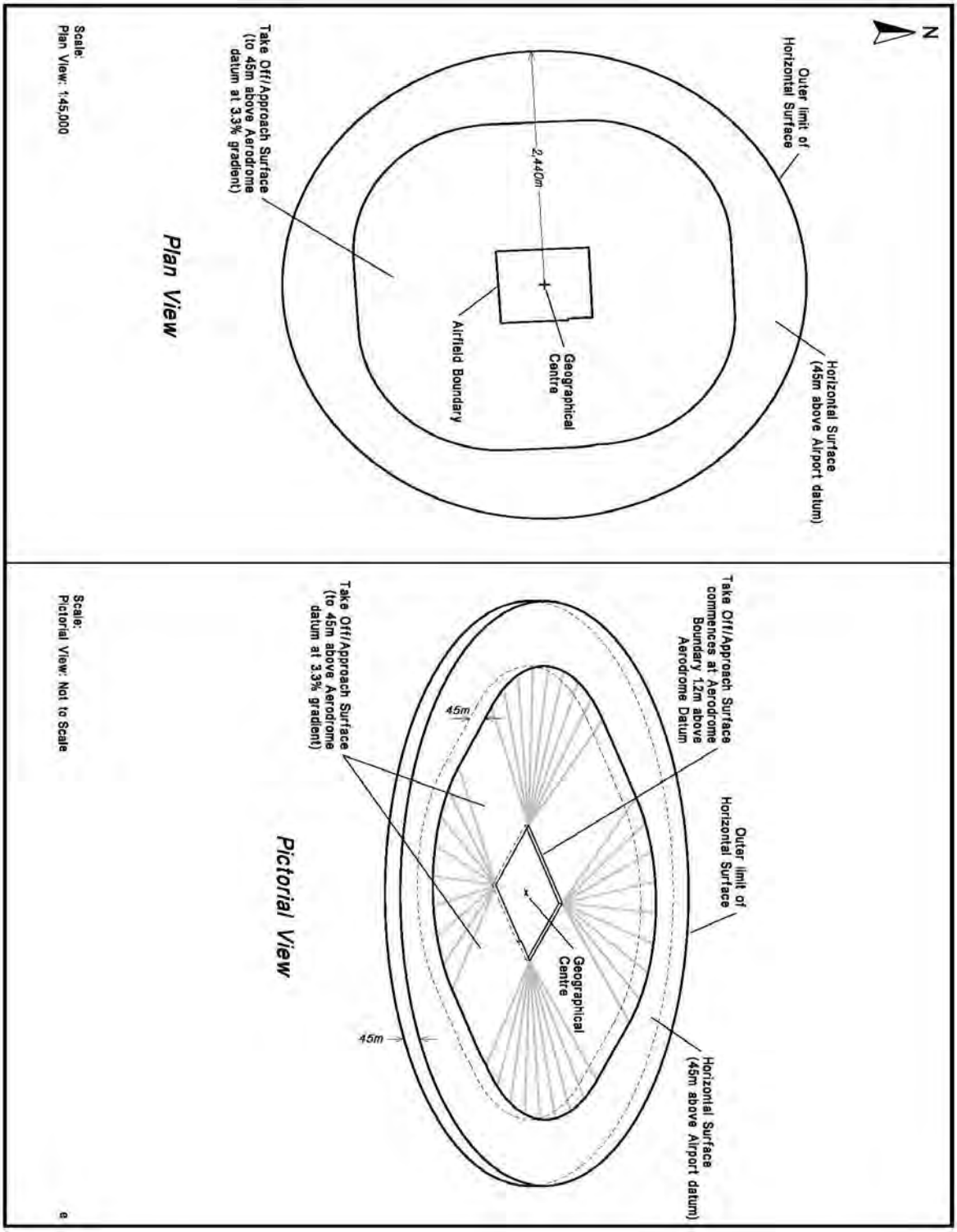


Figure 5: 3D pictorial and plan views of the Omaka Aerodrome Obstacle Limitation Surfaces

Note: The 3D diagram is a pictorial view to assist with application of the obstacle limitation surfaces.
- The 3D pictorial view figure is not to scale.

3. Blenheim Airport Obstacle Limitation Surfaces

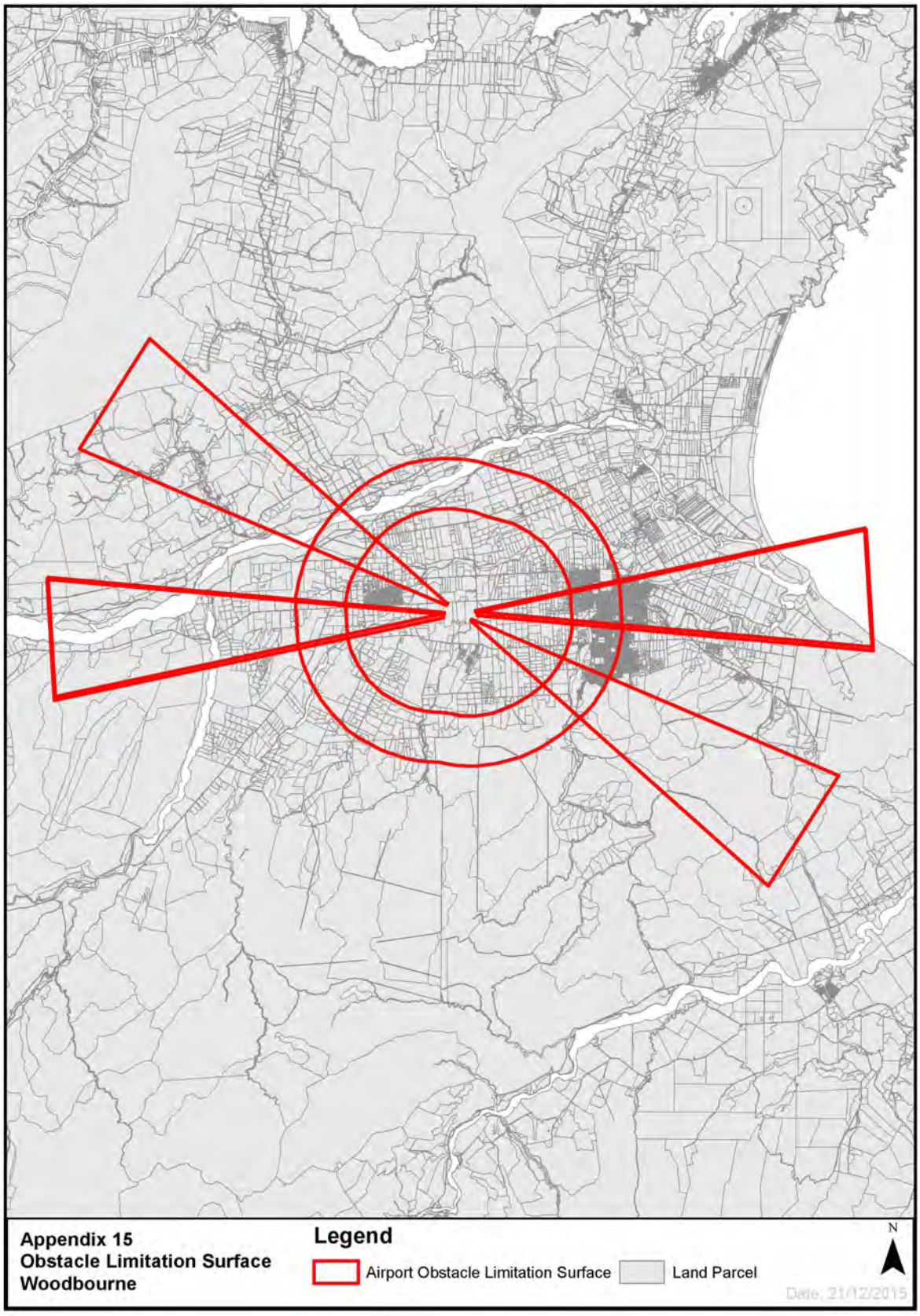


Figure 6: Obstacle Limitation Surfaces

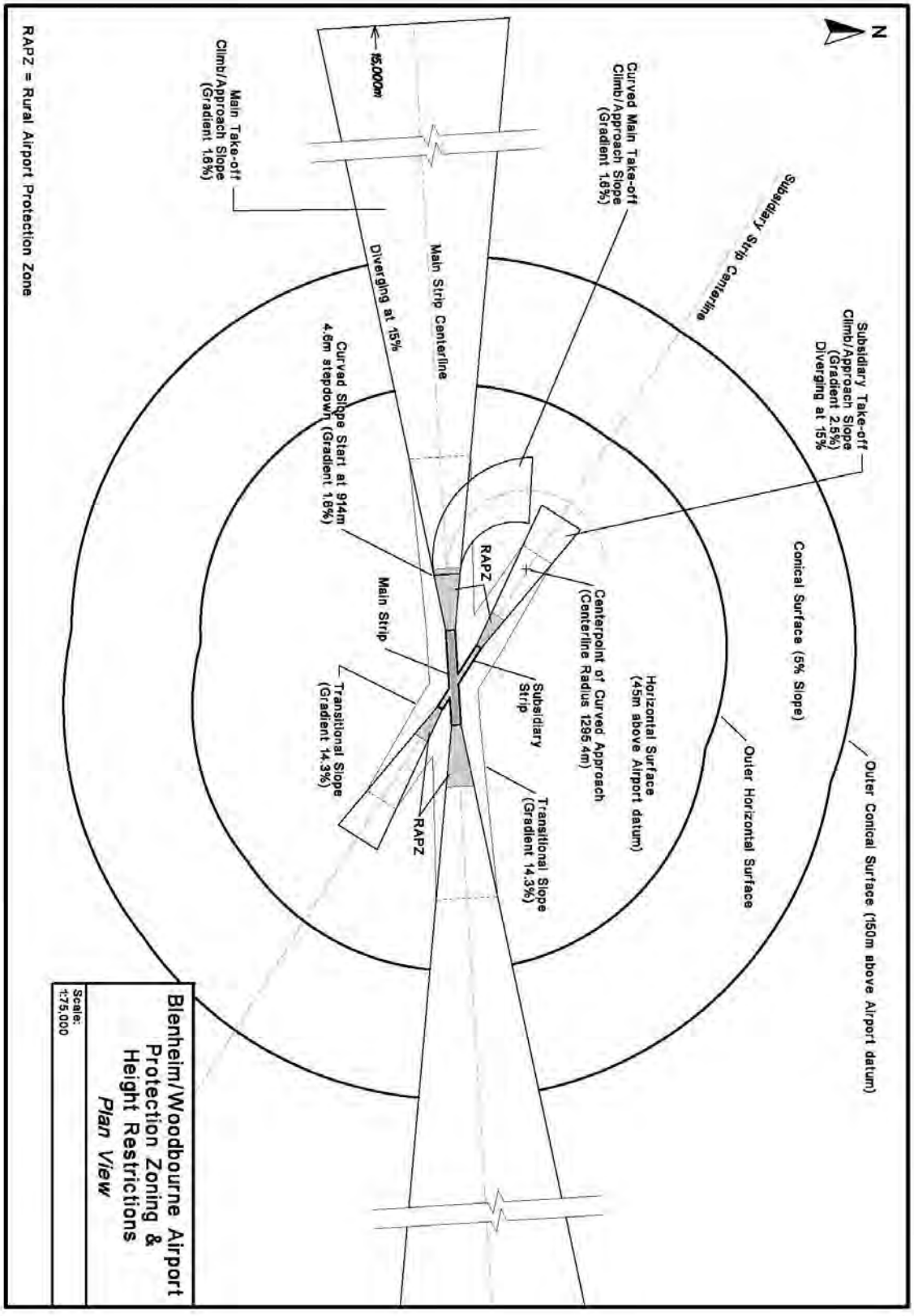


Figure 7: Plan View of Blenheim (Woodbourne) Airport Obstacle Limitation Surfaces

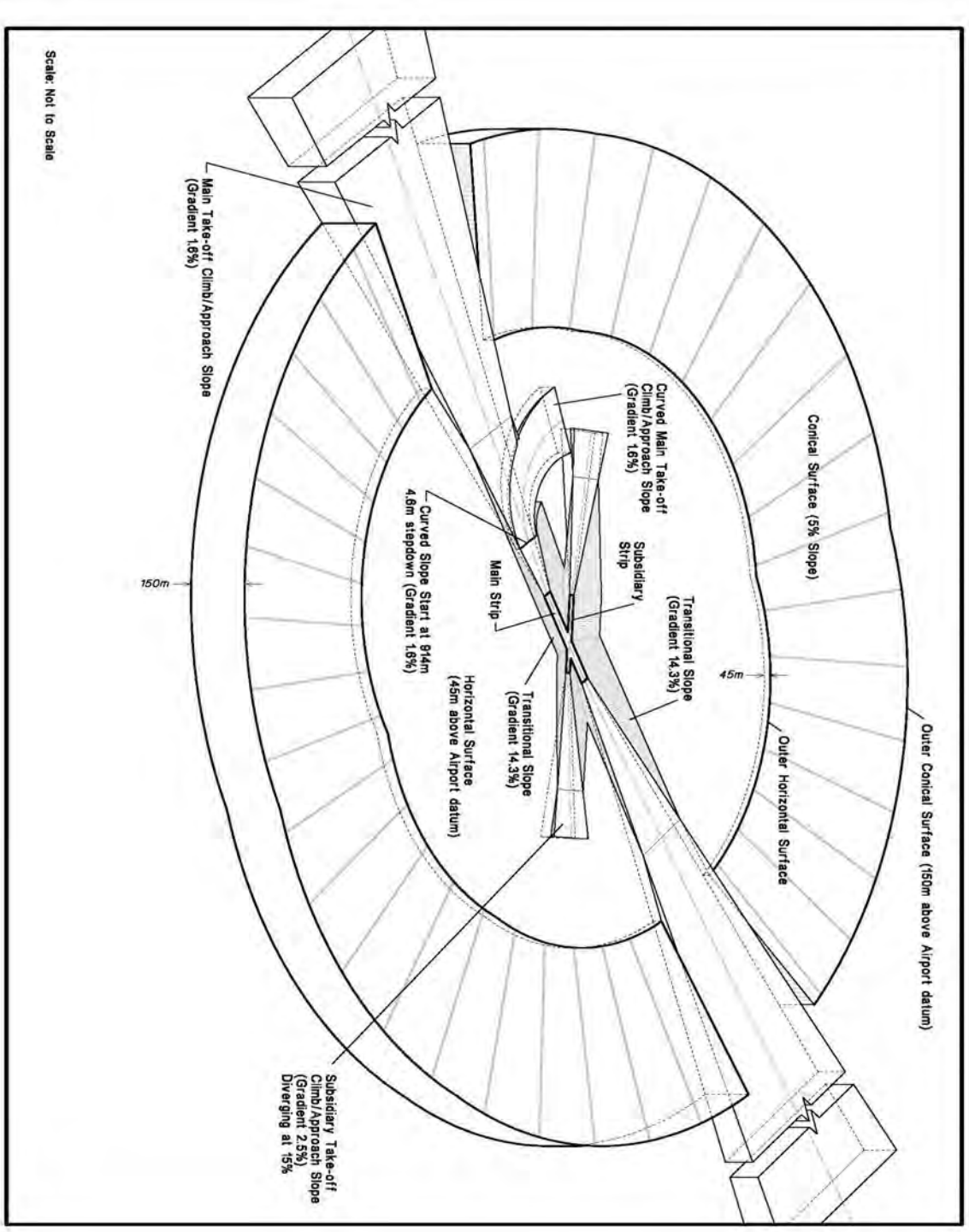


Figure 8: 3D pictorial view of Blenheim Airport Obstacle Limitation Surfaces

Note: This diagram is a 3D pictorial view to assist with application of the obstacle limitation surfaces.
- The diagram is not to scale.

Appendix 16 - Rules having immediate legal effect

Under Section 86B(3) of the RMA the rules and standards specified in the table below have immediate legal effect from 9 June 2016. The associated definitions, appendices and overlays applicable to those rules also have immediate legal effect.

Rule Number	Standard Number(s)
2.4.1[1]	n/a

[1] Although this prohibited activity rule has immediate legal effect, Section 87(b)(1) of the RMA requires that a prohibited activity rule must be treated as a discretionary activity until the rule is made operative.

Appendix 16

Register of scheduled sites

Schedule 1 - Nelson Marlborough Institute of Technology on land described as Pt 50 SO 3824 Deeds Plan 43 (NMIT).

Where not otherwise provided for by the rules in Schedule 1 of Appendix 16, the rules of the Urban Residential 2 Zone apply to all activities on the NMIT scheduled site.

1.1 Permitted Activities

Unless expressly limited elsewhere by a rule in the Marlborough Environment Plan (the Plan), the following activities shall be permitted without resource consent when undertaken by the Nelson Marlborough Institute of Technology, and where they comply with the applicable standards in 1.2:

[D]

1.1.1 Education, research or training facility and buildings associated with the facility.

[D]

1.1.2 Sale of goods and services resulting directly from an educational or training activity.

[D]

1.1.3 On site accommodation facility for students attending NMIT.

[D]

1.1.4 Childcare facility for staff or students attending NMIT.

[D]

1.1.5 Growing and processing of produce incidental to a training activity.

[D]

1.1.6 Temporary building constructed on site by students as part of an education programme.

[D]

1.1.7 Sportsground or recreational facility associated with an education activity.

[D]

1.1.8 Accessory building required for an activity permitted in Rule 1.1.1 to 1.1.7 (inclusive).

1.2 Standards that apply to all permitted activities

1.2.1 Construction and siting of a building or structure.

1.2.1.1 The maximum height of any building or structure must not exceed 15m.

1.2.1.2 Permanent buildings must not cover more than 35% of the net site area.

1.2.1.3 A building must be set back 10m from any road, side boundary or rear boundary.

1.2.1.4 A temporary building constructed on site by students must not be on site for longer than one academic year.

1.2.2 Transportation.

1.2.2.1 The minimum amount of parking that must be provided on this scheduled site is:

(a) 1 space per 7 full time equivalent staff members;

(b) 1 space per 7 full time equivalent students.

1.2.2.2 Parking or a loading facility must otherwise be provided in accordance with the Transportation rules in 2.31 to 2.33 (inclusive) in the General Rules.

1.2.3 Use of external lighting.

1.2.3.1 Exterior lighting must be directed away from adjacent properties and roads.

1.2.3.2 No activity must result in greater than 2.5 lux spill (horizontal and vertical) of light onto an adjoining property which is zoned Urban Residential 1, Urban Residential 2 (including Greenfields) or Urban Residential 3.

1.2.4 Landscaping.

1.2.4.1 The scheduled site must include a landscape strip of a minimum depth of 2m from any road.

1.2.5 Noise.

1.2.5.1 Except as provided for in Standard 1.2.5.2, an activity must not cause noise that exceeds the following limits at the scheduled site boundary or within the scheduled site:

7.00 am to 10.00 pm	50 dBA L_{Aeq}	
10.00 pm to 7.00 am	40 dBA L_{Aeq}	70dB L_{AFmax}

1.2.5.2 Where an outdoor activity associated with an educational facility is undertaken between 7.00 am to 10.00 pm, the noise must not exceed a limit of 60 dBA LAeq when measured at the boundary of the scheduled site.

1.2.5.3 Noise must be measured in accordance with NZS 6801:2008 – Measurement of Environmental Sound, and assessed in accordance with NZS 6802:2008 – Environmental Noise.

1.2.5.4 Construction noise must not exceed the recommended limits in, and must be measured and assessed in accordance with, NZS6803:1999 Acoustics – Construction Noise.

1.3 Discretionary Activities

Application must be made for a Discretionary Activity for the following:

[D]

1.3.1 Any activity provided for as a Permitted Activity that does not meet the applicable standards.

Schedule 2 - Wairau Hospital – (Nelson Marlborough District Health Board) on land described as Lot 1 DP 771, Pt Sec 7 SO 2229, Pt Sec 2 of Sec 27 and Lot 1 DP 137.

Where not otherwise provided for by, or limited by, the rules in Schedule 2 of Appendix 16, the rules of the Urban Residential 2 Zone apply to all activities on the Wairau Hospital scheduled site.

2.1 Permitted Activities

Unless expressly limited elsewhere by a rule in the Marlborough Environment Plan (the Plan), the following activities shall be permitted without resource consent when undertaken by the Nelson District Health Board, and where they comply with the applicable standards in 2.2:

[D]

2.1.1 Health services, including a service relating to physical or mental health needs, an ancillary service including a laundry facility, laboratory facility, pharmaceutical supply, counselling or other health support, and buildings associated with the a service.

2.2 Standards that apply to all permitted activities

2.2.1 Construction and siting of a building or structure.

2.2.1.1 Urban Residential 2 Zone Standard 5.2.1.6 must be met relative to the boundaries of the scheduled site.

2.2.1.2 Notwithstanding 2.2.1.1, the maximum height of a building or structure must not exceed 20m.

2.2.1.3 A building must be set back a minimum of 3m from a road.

2.2.1.4 Notwithstanding 2.2.1.1, a building must be set back a minimum of 3m from the boundaries of the scheduled site, other than a road boundary.

2.2.2 Transportation.

2.2.2.1 The minimum amount of parking that must be provided on this site is:

(a) Hospital - 1 space per 5 beds and 1 space per 2 employees (calculated from employees numbers on the largest shift);

(b) Other health facility - 1 space per employee plus 1 space per 26m² of gross floor area.

2.2.3 Landscaping.

2.2.3.1 The scheduled site must include a landscape strip of a minimum depth of 1m from any road.

2.2.3.2 The scheduled site must include a landscape strip, a fence or a wall along the length of all boundaries, except a road boundary, to a height of not less than 1.8m and, if landscaping, a landscape strip of a minimum depth of 1.5m.

2.2.4 Outdoor storage.

2.2.4.1 Goods and material stored outside shall not be readily visible from a road or an adjoining site.

2.3 Discretionary Activities

Application must be made for a Restricted Discretionary Activity for the following:

[D]

2.3.1 Any activity provided for as a Permitted Activity that does not meet the applicable standards.

2.4 Prohibited Activities

The following are Prohibited Activities for which no application can be made:

[R, D]

2.4.1 The use, storage or disposal of radioactivity in excess of 100 terabecquerels.

Schedule 3 - Richmond View School (Blenheim Elim Church Trust) on land described as Lot 1 DP 5351.

Where not otherwise provided for by the rules in Schedule 3 of Appendix 16, the rules of the Urban Residential 2 Zone apply to all activities on the Richmond View School scheduled site.

3.1 Permitted Activities

Unless expressly limited elsewhere by a rule in the Marlborough Environment Plan (the Plan), the following activities shall be permitted without resource consent when undertaken by the Blenheim Elim Church Trust, and where they comply with the applicable standards in 3.2:

[D]

3.1.1 Education and training facilities and buildings, for primary, intermediate, and secondary students.

[D]

3.1.2 Sports grounds and recreational facilities associated with the education facility.

[D]

3.1.3 Accessory building required for an activity permitted in Rule 3.1.1 and 3.1.2.

3.2 Standards that apply to all permitted activities

3.2.1 Construction and siting of a building or structure.

3.2.1.1 The maximum height of a building or structure must not exceed 10m.

3.2.1.2 Permanent buildings must not cover more than 35% of the net site area.

3.2.1.3 A building must be set back 10m from any road boundary, and 5m from a side or rear boundary.

3.2.2 Transportation.

3.2.2.1 The minimum amount of parking to be provided on this scheduled site must be:

(a) 1 space per full time equivalent staff member;

(b) 1 space per 15 full time equivalent students aged 16 or over.

3.2.2.2 The standards of the General Rules relating to parking or a loading facility must be met.

3.2.3 Use of external lighting.

3.2.3.1 Exterior lighting must be directed away from adjacent properties and roads.

3.2.3.2 No activity must result in greater than 2.5 lux spill (horizontal and vertical) of light onto an adjoining property which is zoned Urban Residential 1, Urban Residential 2 (including Greenfields) or Urban Residential 3.

3.2.4 Landscaping.

3.2.4.1 The schedule site must include a landscape strip for a minimum depth of 2m from any road boundary.

3.2.5 Noise.

3.2.5.1 Except as provided for in Standard 3.2.5.2, an activity must not cause noise that exceeds the following limits at the scheduled site boundary or within the scheduled site:

7.00 am to 10.00 pm	50 dBA L_{Aeq}	
10.00 pm to 7.00 am	40 dBA L_{Aeq}	70dB L_{AFmax}

3.2.5.2 Where an outdoor activity associated with an educational facility is undertaken between 7.00 am to 10.00 pm, noise must not exceed a limit of 60 dBA LAeq when measured at the boundary of the scheduled site.

3.2.5.3 Noise must be measured in accordance with NZS 6801:2008 – Measurement of Environmental Sound, and assessed in accordance with, NZS 6802:2008 – Environmental Noise.

3.2.5.4 Construction noise must not exceed the recommended limits in, and must be measured and assessed in accordance with, NZS6803:1999 Acoustics – Construction Noise.

3.3 Discretionary Activities

Application must be made for a Restricted Discretionary Activity for the following:

[D]

3.3.1 Any activity provided for as a Permitted Activity that does not meet the applicable standards.

Schedule 4 – Specifically identified Urban Residential 2 Zone properties.

Table 1: Glenhill Drive, Brilyn Crescent and Grant Place (3,000+ m^2 Sites in Urban Residential 2 Zone).

Street Address		Legal Description	
1	Brilyn Crescent	LOT 2	DP 339760
1a	Brilyn Crescent	LOT 1	DP 339760
3	Brilyn Crescent	LOT 2	DP 7921
5	Brilyn Crescent	LOT 4	DP 7921
7	Brilyn Crescent	LOT 3	DP 7921
9	Brilyn Crescent	LOT 5	DP 7921
11	Brilyn Crescent	LOT 6	DP 7921
13	Brilyn Crescent	LOT 7	DP 7921
1	Glenhill Drive	LOT 5	DP 6199
3	Glenhill Drive	LOT 6	DP 6199
4	Glenhill Drive	LOT 2	DP 6199
5	Glenhill Drive	LOT 8	DP 6199
6	Glenhill Drive	LOT 3	DP 6199
7	Glenhill Drive	LOT 9	DP 6199
8	Glenhill Drive	LOT 4	DP 6199

Street Address		Legal Description	
9	Glenhill Drive	LOT 10	DP 6199
10	Glenhill Drive	LOT 18	DP 6199
11	Glenhill Drive	LOT 11	DP 6199
11 A	Glenhill Drive	LOT 12	DP 6599
12	Glenhill Drive	LOT 19	DP 6199
14	Glenhill Drive	LOT 20	DP 6599
15	Glenhill Drive	LOT 13	DP 6599
16	Glenhill Drive	LOT 21	DP 6599
17	Glenhill Drive	LOT 14	DP 6599
18	Glenhill Drive	LOT 22	DP 6599
19	Glenhill Drive	LOT 15	DP 6599
20	Glenhill Drive	LOT 23	DP 6599
21	Glenhill Drive	LOT 16	DP 6599
23	Glenhill Drive	LOT 17	DP 6599
188	Hospital Road	LOT 1	DP 6199
194	Hospital Road	LOT 7	DP 6199
10	Grant Place	LOT 12	DP 8450
11	Grant Place	LOT 13	DP 8450
11A	Grant Place	LOT 14	DP 8450

Table 2: Redwood Street (1200+ m^2 Sites in Urban Residential 2 Zone).

Street Address		Legal Description	
231	Redwood Street	Lot 2	DP 10374
233	Redwood Street	Lot 3	DP 10374
235	Redwood Street	Lot 4	DP 10374
237	Redwood Street	Lot 5	DP 10374
239	Redwood Street	Lot 6	DP 10374
241	Redwood Street	Lot 7	DP 10374
243	Redwood Street	Lot 8	DP 10374
245	Redwood Street	Lot 9	DP 10374
247	Redwood Street	Lot 10	DP 10374
249	Redwood Street	Lot 11	DP 10374

Appendix 17

Roading Hierarchy

1. National Routes

1.1 SH1 Picton - Tirohanga

1.2 SH6 Blenheim – Rai Saddle

1.3 SH62 Rapaura Road

1.4 SH63 Renwick - Tophouse

2. Primary Arterials

2.1 Grove Track

2.2 Kent St (SH 1 – Dublin St)

2.3 Mahakipawa Hill Rd

2.4 Queen Charlotte Drive

3. Secondary Arterials

3.1 Alabama Rd (Redwood St to New Renwick Rd)

3.2 Alfred St (Seymour St – Sinclair St (SH 1))

3.3 Battys Rd

3.4 Dodson St

3.5 Hutcheson St (Alfred St - Nelson St (SH 6))

3.6 Jacksons Rd

3.7 Lansdowne St

3.8 Main St (Sinclair St (SH 1) - Maxwell Rd)

3.9 Maxwell Rd (Main St - Seymour St)

3.10 New Renwick Rd (Maxwell Rd -Battys Rd)

3.11 Northbank Rd (SH 6 - Onamalutu turnoff)

3.12 Old Renwick Rd

3.13 Redwood St (Main Street (SH 1) - Alabama Rd)

3.14 Seymour St (Maxwell Rd - Alfred St)

4. Picton Urban Area Collector Routes

4.1 Dublin St (Auckland St (SH 1) - Waikawa Rd)

4.2 Port Underwood Rd (Waikawa Rd - Karaka Point)

4.3 Waikawa Rd

5. Havelock Urban Area Collector Routes

5.1 Cook Street

5.2 Inglis Street

6. Marlborough Rural Area Collector Routes

6.1 Anglesea St

6.2 Awatere Valley Rd (SH 1 - Medway)

6.3 Bells Road

6.4 Croiselles-French Pass Rd (SH 6 – Okiwi Bay)

6.5 Ferry Rd

6.6 Godfreys Rd

6.7 Hunter Rd

6.8 Kenepuru Rd (Linkwater – Kenepuru Heads)

6.9 Murphys Rd

6.10 New Renwick Rd (Battys Road - Godfreys Rd)

6.11 Northbank Rd (Onamalutu turnoff - Top Valley)

6.12 O'Dwyers Rd

6.13 Pembers Rd

6.14 Rarangi Rd

6.15 Thompsons Ford Rd

6.16 Vickerman St

6.17 Wakefield St, Seddon

7. Blenheim Urban Area Collector Routes

7.1 Boyce St

7.2 Budge Street

7.3 Colemans Rd

7.4 Dillon St (Eltham Rd - Lee St)

7.5 Dillons Point Rd (to Rowberrys)

7.6 Eltham Rd

7.7 High St (Seymour St to Boyce St)

7.8 Hutcheson St (Nelson St (SH 6)–Lansdowne)

7.9 Lee Street

7.10 Maxwell Rd (Seymour St - Hospital Rd)

7.11 Taylor Pass Road (Hospital Rd – Wither Rd)

7.12 Murphys Rd

7.13 Redwood St (Alabama Rd - Wither Rd)

7.14 Scott St (Main St – Seymour St)

7.15 Seymour St (Scott St - Maxwell Rd)

7.16 Taylor Pass Rd

7.17 Wither Rd (Redwood St to Maxwell Rd)

8. Awatere Area Local B Roads

8.1 Ballochdale

8.2 Barewood

8.3 Brookbourne

8.4 Castles (pt)

8.5 Clifford

8.6 Dumgree

8.7 Flemings (south)

8.8 Gladstone

8.9 Glenake

8.10 Haldons

8.11 Higgins (pt)

8.12 Kaparu (pt)

8.13 Marfells

8.14 Maxwell Pass

8.15 Medway (pt)

8.16 Middlehurst

8.17 Muller

8.18 Reserve

8.19 Rudds

8.20 Tallots

8.21 Ugbrooke

8.22 Upton Downs (pt)

8.23 Ure (pt)

8.24 Waireka

8.25 Weld

8.26 Wests

8.27 Wharanui Beach

9. Wairau Area Local B Roads

9.1 Avon Valley

9.2 Cat Creek

9.3 Cemetery

9.4 Jacks

9.5 Leatham (pt)

9.6 McCallums

9.7 Meadowbank

9.8 Mill

9.9 Ngaruru

9.10 Omaka Downs

9.11 Parsons (pt)

9.12 Pukaka

9.13 Quaildale

9.14 Schollums

9.15 Spray

9.16 Te Rou

9.17 Tyntesfield (pt)

10. Kenepuru Area Local B Roads

10.1 Anahoka (pt)

10.2 Elie Bay (pt)

10.3 Hopai

10.4 Kinders

10.5 Mason

10.6 Titirangi (pt)

10.7 Totaranui

10.8 Waitui

11. Croisilles, French Pass Area Local B Roads

11.1 All d'Urville Island roads

11.2 Bulwer

11.3 Kaiuma

11.4 Kamahi

11.5 Kotuku

11.6 Rimu Gully (pt)

11.7 Sangsters

11.8 Te Towaka – Pt Ligar (pt)

11.9 Tunapai

11.10 Waitata

12. Other Sounds Area Local B Roads

12.1 Boultons

12.2 Butlers

12.3 Cameron (Kaituna)

12.4 Dalton (pt)

12.5 Douslins Gully

12.6 Hebberds (pt)

12.7 Kaiuma Bay (pt)

12.8 Leslies (pt)

12.9 Long Valley (pt)

12.10 Maungatapu (pt)

12.11 Meadow view

12.12 Norths

12.13 Readers

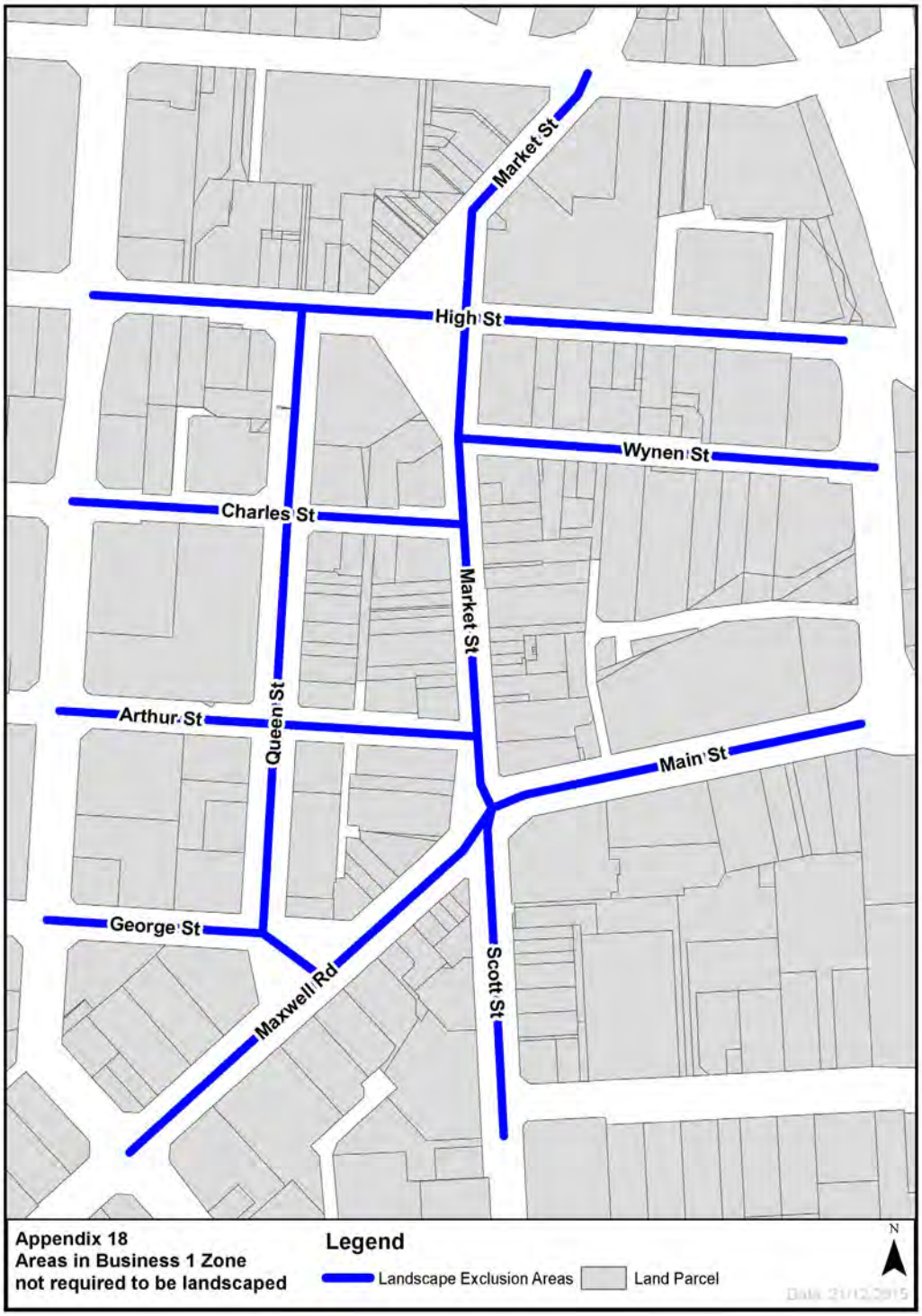
12.14 Taylors

12.15 Tinline

13. All other Roads classed as Local Roads

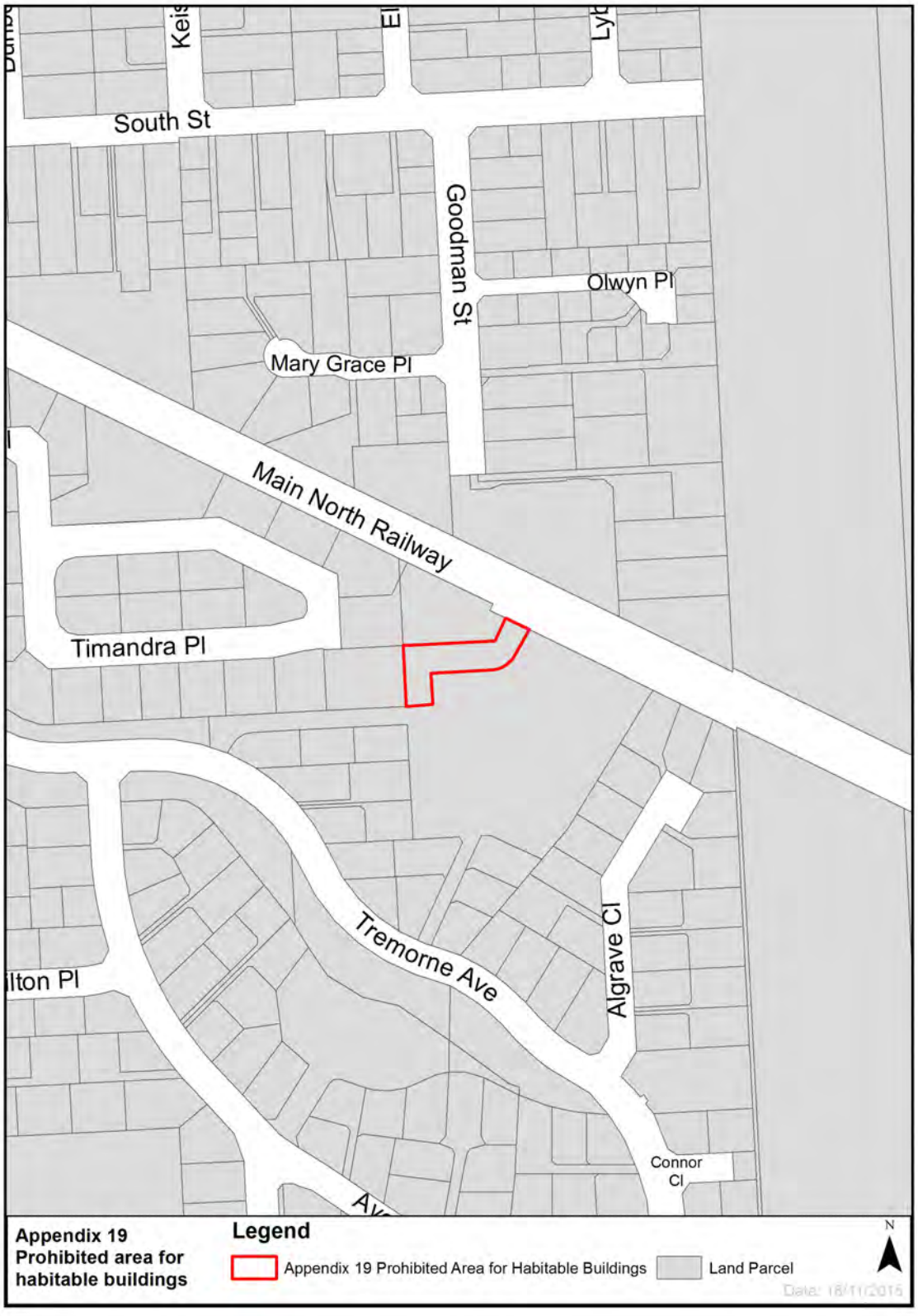
Appendix 18

Landscape Exclusion Streets in Business 1 Zone



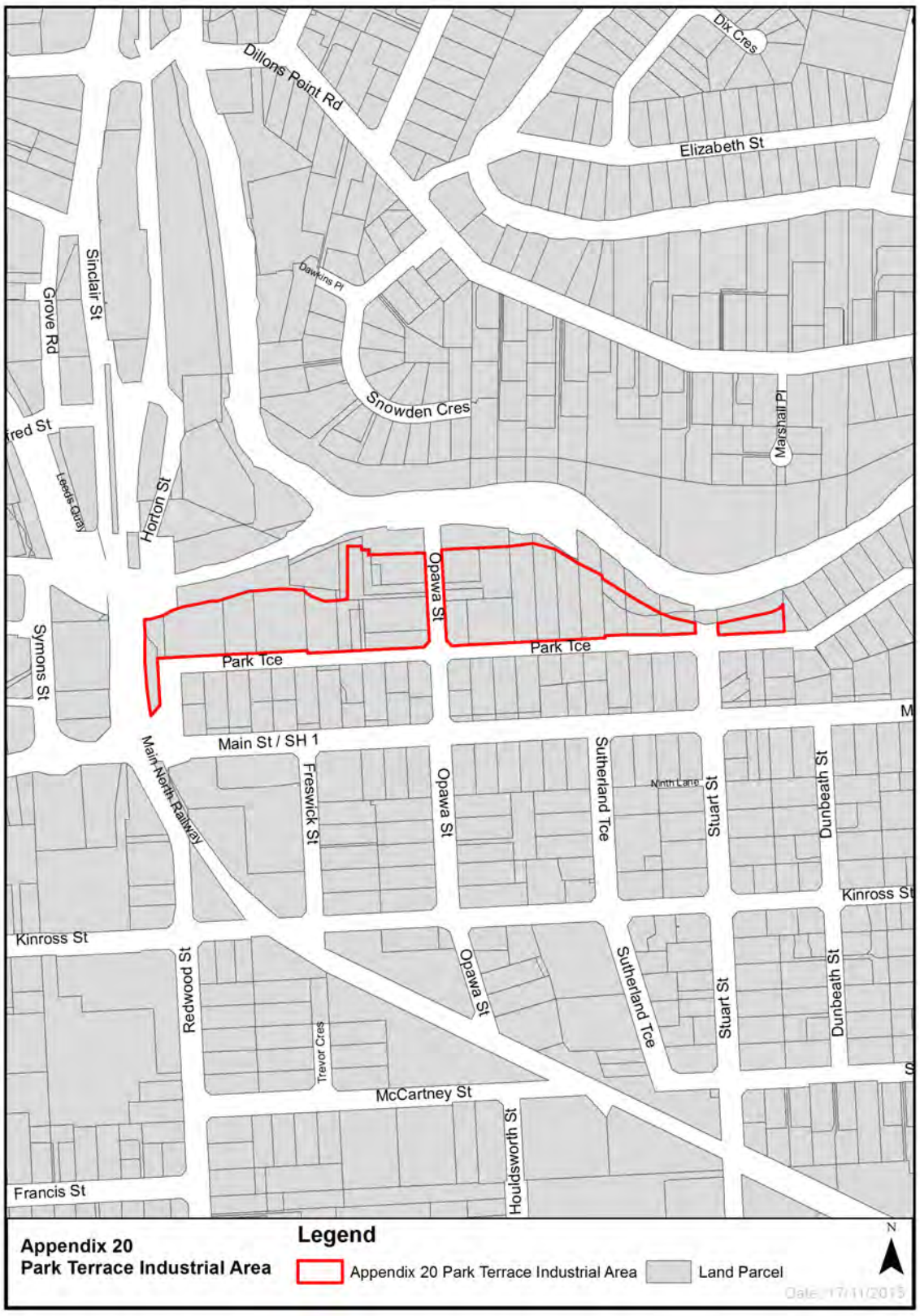
Appendix 19

Lot 15 DP 395434 - Prohibited Area for Habitable Buildings

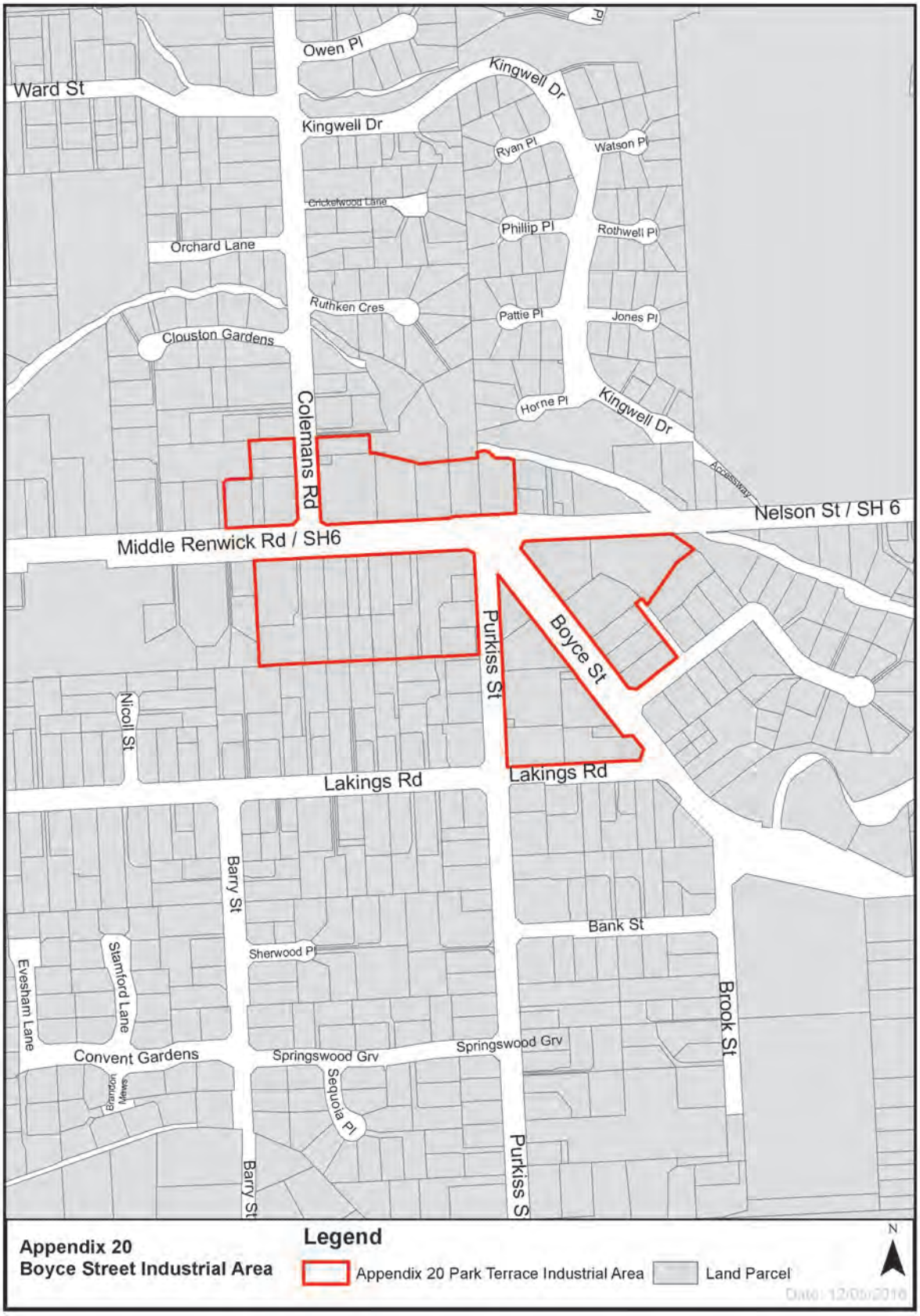


Appendix 20

Park Terrace Industrial Area

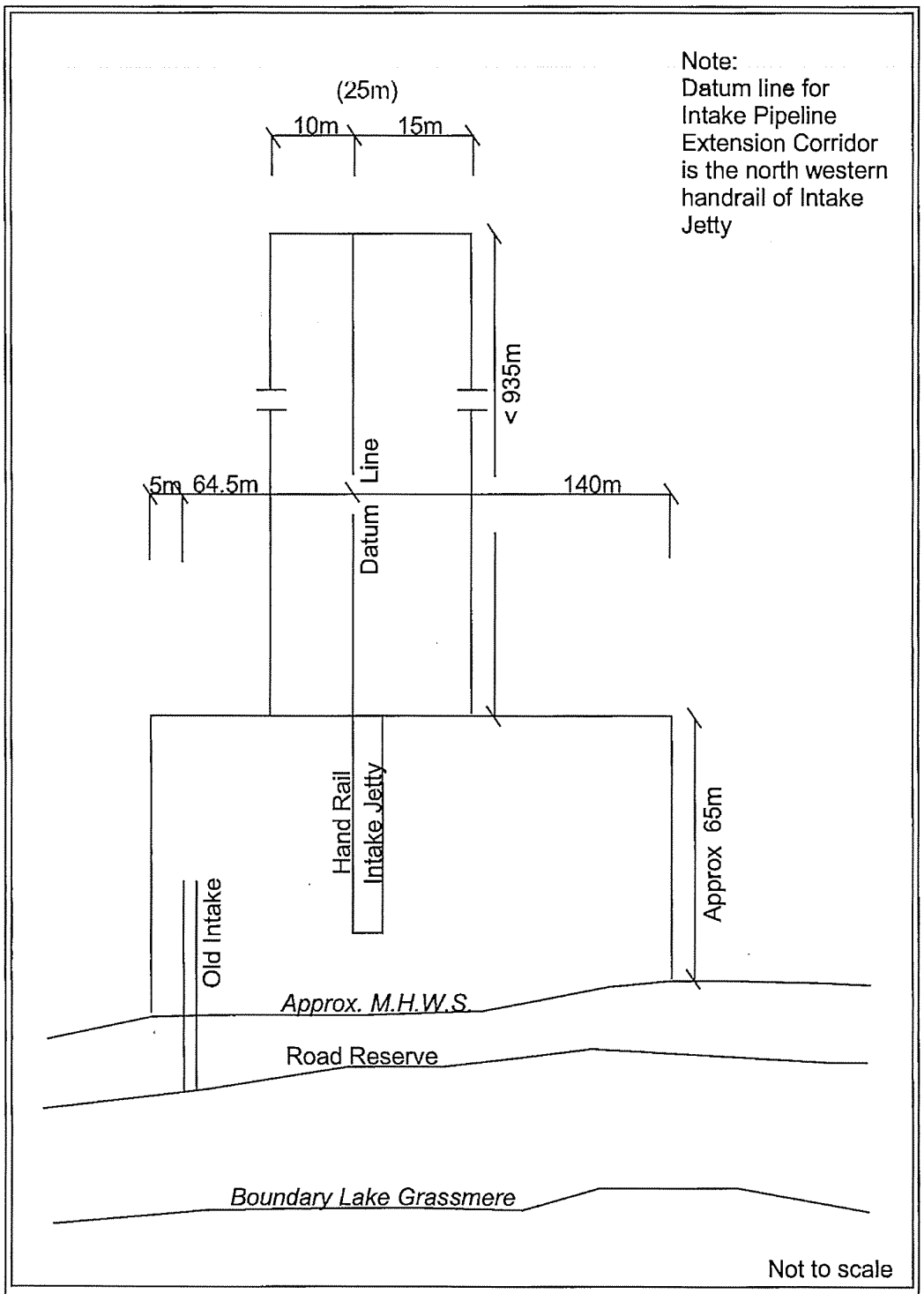


Boyce Street and Nelson Street Industrial Area



Appendix 21

Lake Grassmere Salt Works Zone intake and pipeline extension corridor



Lake Grassmere Salt Works Zone
Intake and Pipeline Extension Corridor

Appendix 22

Commercial Forestry Harvest Plan

The matters that must be addressed in any Commercial Forestry Harvest Plan are:

1. The name and contact details of the landowner, the owner of the cutting rights to the forest on the land and the manager of the harvesting operation.

2. When it is intended the harvesting will commence and when it will be completed.

3. If harvesting of any block will continue for more than one year, the stages in which harvesting will be carried out and when.

4. The location on a map of all rivers, lakes or significant wetlands within or adjacent to the area to be harvested.

5. The location on a map of the coastal marine area if it is within 50 metres of the area to be harvested.

6. The location on a map of all existing and new forestry roads, forestry tracks and skid sites to be used, created or maintained.

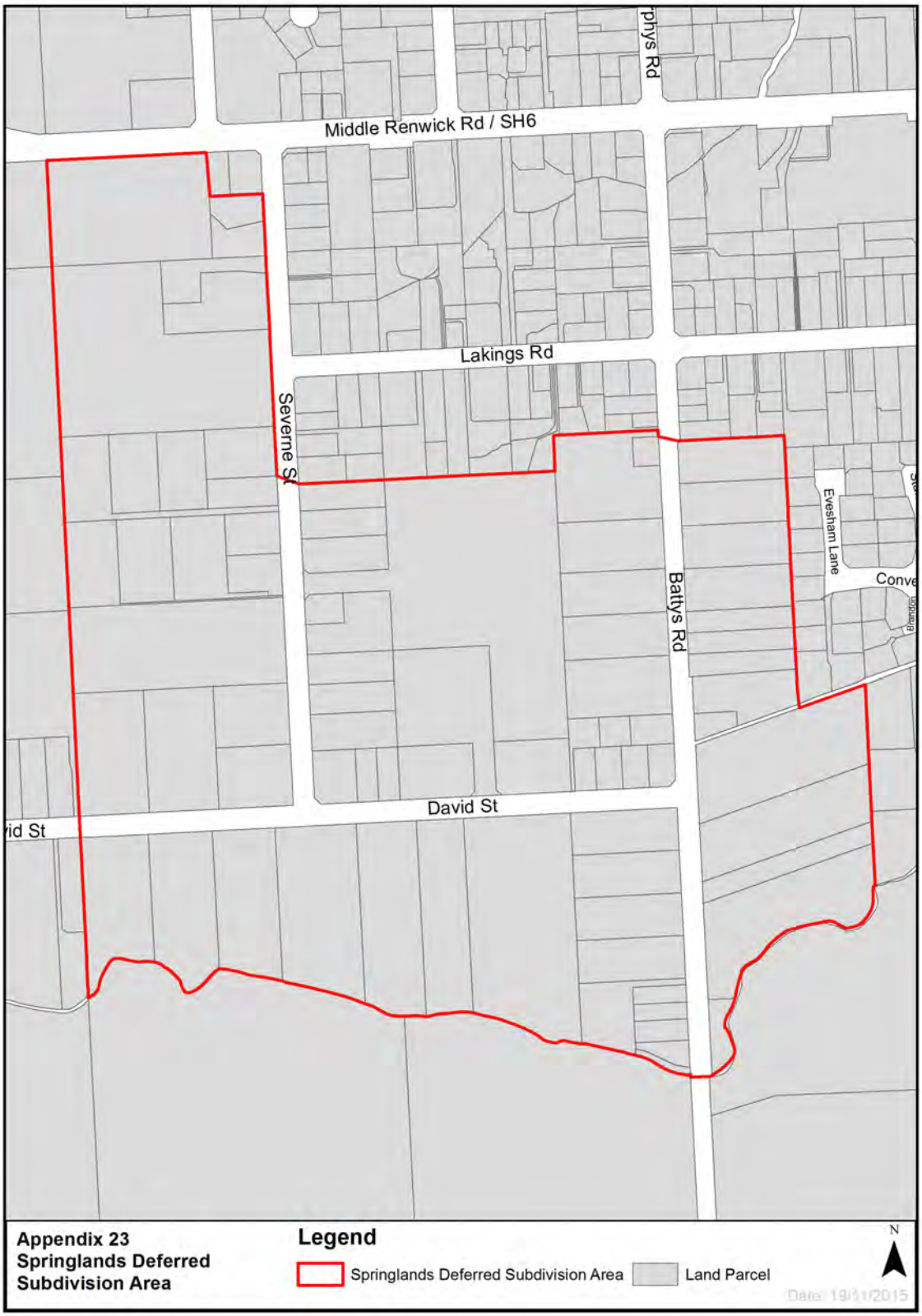
7. The harvesting methods to be used and which areas will be cable-hauled and which will be harvested using ground based methods.

8. The erosion and sediment control methods to be used.

9. Slash storage sites identified and clearly documented, including using skid diagrams for each site.

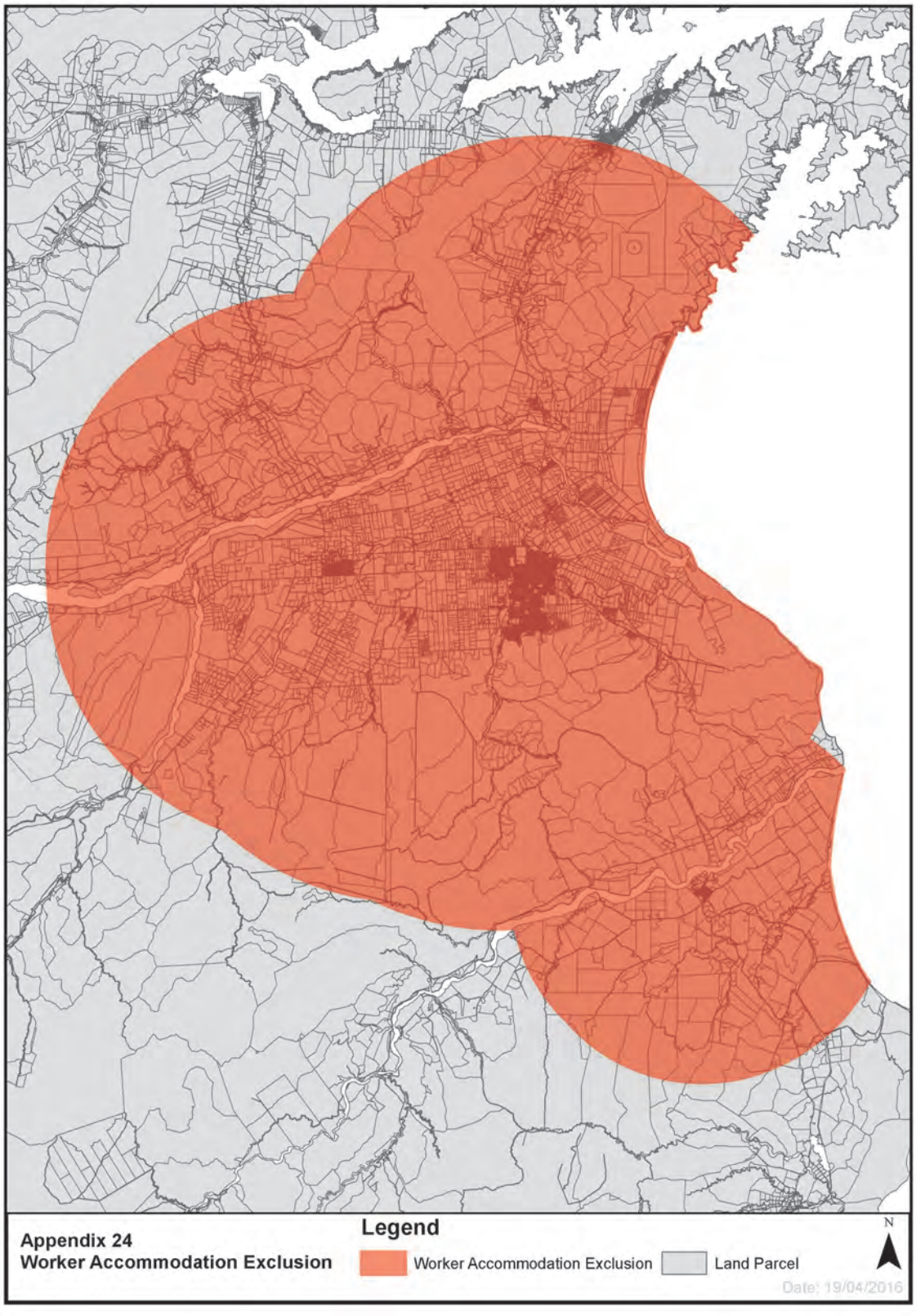
Appendix 23

Springlands Deferred Subdivision Area



Appendix 24

Worker Accommodation Exclusion Area



Appendix 25

Pest Plants

Common Name	Scientific Name
African Feather Grass	*Pennisetum macrourum*
Eel Grass	*Vallisneria australis*
Parrots Feather	*Myriophyllum aquaticum*
Senegal Tea	*Gymnocoronis spilanthoides*
Reed Sweet Grass	*Glyceria maxima*
Egeria	*Egeria densa*
Lagarosiphon	*Lagarosiphon major*
Purple Loosestrife	*Lythrum salicaria*

Appendix 26

Recession Plane and Height Controls

1. Recession Plane – Height in Relation to Boundaries

The recession plane angle of inclination from horizontal depends on the orientation of the boundary concerned – see Figures 1a and 1b.

Guidelines for Use

1. Orientate the indicator to North and retain this orientation throughout the exercise.
2. Place the outer circle against each site boundary in turn, from within the site, and ensure north orientation is constant.
3. The recession angles to be applied for each boundary are read from the angle figures marked on the inner circle. If the boundary falls exactly half way betweem the degree figures shown apply the mean recession angle, otherwise apply the stated angle which is closest.

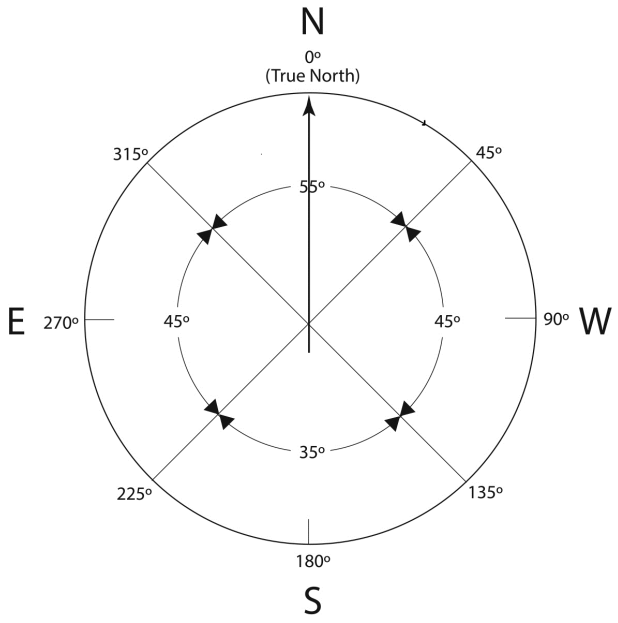


Figure 1a. Recession Plane Indicator.

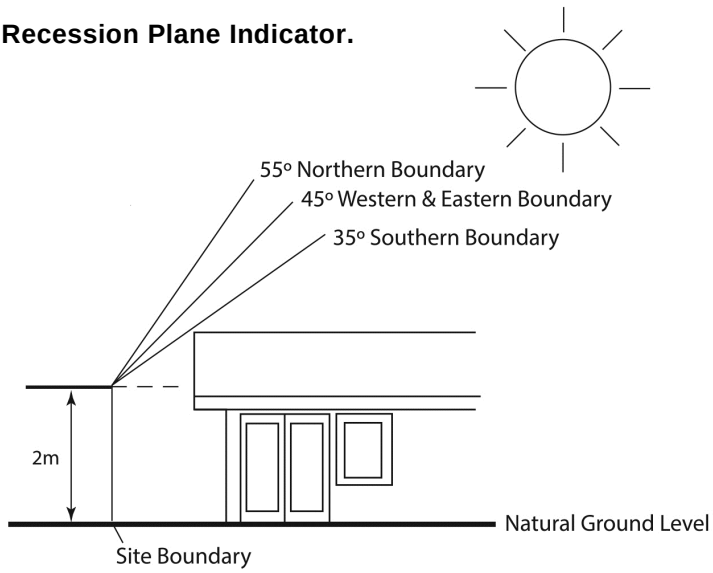


Figure 1b. Recession Plane Cross Section.

2. Height Controls

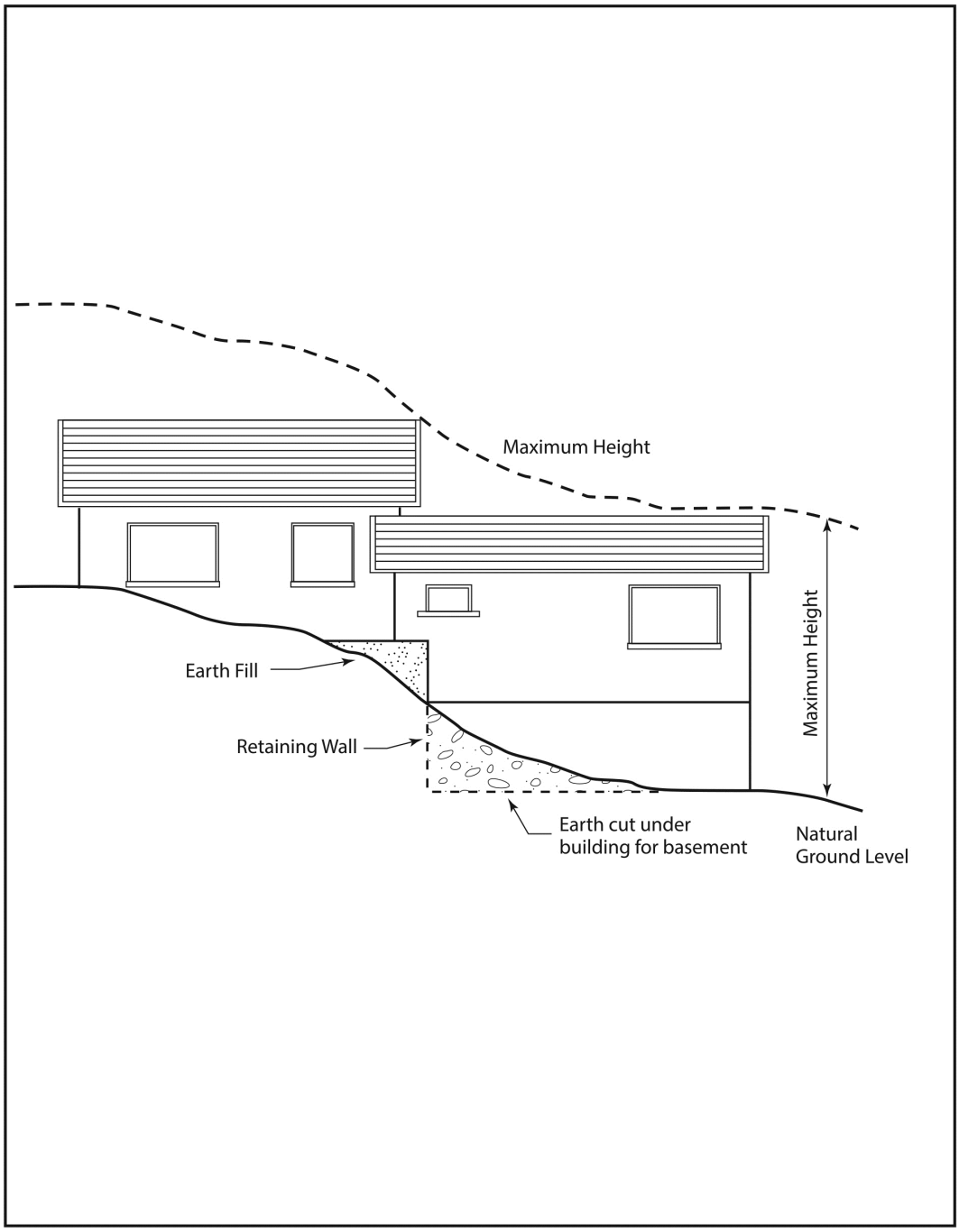


Figure 2. Maximum Height.