

Visual and Natural Character Effects Assessment

Waikawa Bay Plan Change

Prepared for Port Marlborough
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February 2010



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1 INTRODUCTION

Port Marlborough commissioned Boffa Miskell Ltd to prepare an assessment of the visual and natural character effects of the proposed plan change to manage water space within Waikawa Bay. The plan change proposes an extension to the Marina Zone and the creation of four mooring management areas.

1.1 Scope of Assessment

The Plan Change seeks to provide for the long term management of the water space in Waikawa Bay. In terms of visual and natural character effects, the plan change application has two key aspects: an extension to the northwest end of the marina zone, and establishment of defined Mooring Management Areas.

While the Plan Change itself will not create landscape or visual effects, subsequent development within the proposed marina zone and mooring management areas will. This assessment considers the reconfiguration of moorings in the bay and the development of a marina in the proposed marina zone extension (northwest marina extension). In addition, the assessment takes into account the possible development of a marina in the as yet undeveloped part of the existing marina zone (northeast marina extension). See Figure 1.

The assessment of possible marina developments is based on an indicative marina layout prepared by International Marina Consultants (ref: 3537-06) which is similar in nature to the existing marina.

If the marina were to be extended as outlined above, the existing moorings displaced by the extension(s) would need to be relocated elsewhere in the bay. The proposed mooring management areas would accommodate these moorings.

This report assesses the effects of the proposed mooring management areas being occupied to full capacity, and the simulations show the mooring management areas at full capacity. In reality, it is unlikely that all of the moorings would be occupied all of the time.

In summary, this assessment considers the potential visual and natural character effects if both potential marina expansions were to be fully developed, and the mooring management areas established. (Figure 1) The assessment anticipates that the marina development will consist of breakwaters and berthed vessels of a similar nature and scale to the existing marina, and does not anticipate that large bulky structures or buildings will be constructed in the marina zone.

2 STATUTORY FRAMEWORK

The two key visual and natural character issues relevant to this proposal are: the natural character of the coastal environment, and the visual and landscape values of the Marlborough Sounds. These issues are primarily addressed in Chapter 2 ('Natural Character') and Chapter 5 ('Landscape') of the Marlborough Sounds Resource Management Plan (MSRMP), but are also supported in other chapters.

Section 6(a) of the RMA declares as a matter of national importance, *The preservation of the natural character of the coastal environment (including the coastal marine area)... and the protection of them from inappropriate subdivision, use and development.* While not defined, the coastal environment for this assessment is considered to be the whole Waikawa Bay

land/seascape, including the skylines, slopes, shoreline and sea. Consideration of what constitutes ‘appropriate’ development or use of the Waikawa Bay coastal environment is a key aspect of this assessment.

The National Coastal Policy Statement expresses ways in which the natural character of the coastal environment can be preserved and this is given effect in Chapter 2 of the MSRMP.

The visual and scenic values of the coastal landscapes and seascapes also contribute to the amenity and recreational values of the Sounds. Section 7 (c) of the RMA addresses the maintenance and enhancement of amenity values. Chapter 5 of the MSRMP gives this effect by addressing the management and protection of the visual and landscape values of the Sounds.

2.1 Chapter 2, Natural Character

This chapter sets out the objective and eight policies with regard to the management of the natural character of the Sounds. Appendix 2 of the MSRMP describes the natural character of the land and coastal/marine areas of the Sounds and identifies 19 Natural Character Areas (sheet 106). Waikawa Bay lies within the ‘Robertson’ land ecosystem and the ‘Queen Charlotte Sound’ marine ecosystem.

With regard to development proposals, Policies 1.1-1.8 seek to:

- *Avoid adverse effects of development in areas which are predominantly in their natural state,*
- *Encourage appropriate development in areas where the coastal environment has been already been compromised and adverse effects can be avoided, remedied or mitigated,*
- *Consider and assess the potential effects of a development on all components of natural character,*
- *Promote an integrated approach to preservation of natural character,*
- *Give regard to restoration/rehabilitation of natural character of the development site,*
- *Recognise the importance of preserving the intactness of the Natural Character Areas.*

2.2 Chapter 5, Landscape

This chapter recognises the dynamic landscapes and seascape as important components of the natural character and amenity values of the Sounds. The stated Landscape objective is to manage the visual quality of the Sounds and to protect outstanding natural features and landscapes from inappropriate subdivision, use or development.

While outstanding natural features and landscapes are identified in the Plan, the importance of protecting the *visual and landscape values* of the Sounds is also recognised. Waikawa Bay is not identified as an area of outstanding landscape value, but the plan states that the Sounds in their entirety have outstanding visual values.

The Plan recognises that overall the Sounds are highly modified as a result of 150 years of changing land uses, and that development pressures of today can be accommodated if they are appropriate to their site.

'Inappropriate' subdivision, use or development has the potential to adversely affect the visual and natural character values of the Sounds. The activities with the potential to do this are listed (in 5.2) as:

- *Structures on the land,*
- *Structures on the water,*
- *Land disturbance,*
- *Change of vegetation cover,*
- *Subdivision.*

3 PLAN CHANGE DETAILS

The details of the Plan Change as they relate to visual and natural character issues are summarised below.

Marina Zone

The Marina Zone has been established in the Plan to provide accommodation for a variety of vessels supported by a range of boating industry activities, both land and water based. The existing marina at Waikawa has extensive land based facilities. Due to the diversity of areas covered by this zone, the Marina Zone provisions provide for most new structures and reclamations as discretionary activities. This allows Council to assess development proposal on their merits, assessing the appropriateness of the specific proposals within the receiving environment.

Marina Zone Extension.

The extension to the marina zone proposed at the north end of the existing western marina area could accommodate approximately 240 additional vessels in a 7.9ha area and extend approximately 470m along the shoreline.

Mooring Management Areas

The Plan Change proposes the establishment of four defined Mooring Management Areas, with the rest of the bay remaining as open water. The proposal would essentially relocate the same number of moorings that exist in the bay now¹. The Mooring Management Areas would have the effect of limiting the number of moorings that could be established in the bay 'as of right'.

The three larger proposed mooring areas together occupy 25.5 ha of water space and could accommodate approximately 200 vessels. A smaller mooring management area adjacent to the Waikawa Bay beach, exclusively for waka, is also proposed.

Figure 2 shows the 'existing' mooring pattern (including existing and proposed moorings) and the proposed mooring management areas. Both images show a vessel at each of the moorings.

¹ Including those which are already consented but not installed

4 EXISTING LANDSCAPE CONTEXT

4.1 Location

Waikawa Bay is located in Queen Charlotte Sound, northeast of Picton Harbour. The bay is typical of many within the Marlborough Sounds, being relatively narrow and long, reflecting its formation as a flooded river valley. The entrance of the bay is approximately 1.4km wide, and is defined by the headlands of the Snout landform and Karaka Point. Figure 1.

The Snout is a locally prominent peninsula, separating Waikawa Bay and Picton Harbour. It is a well known landmark in Queen Charlotte Sound, with the majority of vessels, including the Wellington – Picton ferries, passing close by en-route to and from Picton.

4.2 Landscape/Seascape Context and Character

Waikawa Bay has a convoluted shoreline forming a series of smaller bays, and embayments backed by steep vegetated slopes. The bay has a strong sense of enclosure created by its elongated nature and the surrounding slopes and skylines. The bay is oriented in a northeast to southwest direction. The head of the bay and the slopes on the eastern shore are more developed than the western slopes.

The photographs in Figure 3 help to illustrate the existing landscape/seascape character of Waikawa Bay.

The enclosing landform to the northwest, known as the ‘Snout’, is a relatively narrow peninsula that extends approximately 2km from the Waikawa Marina, at the head of the bay, to the headland. The peninsula reaches a high point of 185m above sea level overlooking the settlement of Waikawa. A public walkway follows the ridgetop of the peninsula, connecting the Snout headland with Picton.

The eastern landform enclosing the bay is more substantial than the Snout. It is a broad hill separating Whatamango and Waikawa Bays. The main ridge of the landform reaches an elevation of 518m east of the Waikawa settlement and terminates as a small low headland, Karaka Point, in the north. Port Underwood Road, elevated above the eastern shore of the bay, provides access to dwellings situated below and above the road.

Development pattern

The photographs in Figure 3 assist to describe the settlement pattern of the bay. The pattern of settlement and development in Waikawa Bay relates strongly to the topography, aspect and road network. The flatter land at the head of the bay is densely settled with predominantly residential development which extends well along the valley floor toward Picton. The water space at the head of the bay is also densely occupied with marinas and moored vessels.

The land-based facilities of the Waikawa Marina, immediately adjacent to the shore, comprise a mixture of large car and boat parking areas, industrial scale buildings, and retail, commercial and hospitality activities. Multi-unit accommodation, and other marina support activities are located close to the marina complex; creating a high density node of activity relatively close to the shore. The marina itself, enclosed by rock breakwaters, creates a transitional development pattern between the relatively dense land-based marina area and the ‘open water’ of the bay beyond. The existing marina development has

the potential to extend into the north east marina zone. If this were to occur, it would add further to the developed nature of the head of the bay.

Moored vessels are concentrated in the inner bay, close to the shore and existing marinas. Their distribution on the open water appears as a transition between the higher density of the marinas and the open bay beyond. Individual and groups of moored vessels are scattered along the eastern shore and in Beeches Bay. The changing wind direction adds a dynamic nature to the moored vessels which change orientation with each wind shift.

Residential development on the eastern shore and slopes is most dense near the water, at the head of the bay (Urban Residential zone with a minimum lot size of 450m²) and on flatter land at the base of small gullies which are a feature of this side of the bay. Notwithstanding this, a linear settlement pattern of dwellings has developed along Port Underwood Road, primarily below the road, and extends almost continuously to Karaka Point. Much of the land adjoining Port Underwood Road is zoned as Sounds Residential (with a minimum size for a lot with a dwelling being 1000m² with reticulated sewerage, and 4000m² without reticulated sewerage). Recent and ongoing residential development on the slopes above the road is creating a scattered pattern of settlement characterised by large dwellings some with highly visible access roads and building platform cuts. It seems likely that this type of development will continue in the Sounds Residential zone. (Photograph 1, Figure 3)

By contrast, the opposite side of the bay, to the north along the Snout, is relatively 'undeveloped'. The slopes of the Snout are generally free of buildings, with the exception of several dwellings on the slopes above the marina, and small dwellings nestled into the vegetated slopes close to the waterline beyond the marina. (Photograph 2, Figure 3). A recently consented subdivision, comprising nine dwellings, a jetty and cable car, is yet to be developed at the northern end of the Snout. While this development is proposed to have a low visual impact, it will be visible and to some extent will modify what currently appears to be an undeveloped and more remote part of the peninsula. The slopes along the Snout are zoned Rural so are not anticipated to be developed to the density of the eastern shore which is zoned Sounds Residential.

Consequently, there are two distinct characters on either side of the bay: the Snout dominated by dense vegetation and low density development; and the lower eastern slopes dominated by residential development of varying density, jetties and boatsheds along the shoreline, and Port Underwood Road.

The overall character of the bay is a continuum, from dense development and high levels of activity in the marina and inner bay area, dispersing to low density linear development along the lower slopes and waterline of the eastern shore. The marina and its activity are a dominant feature of the bay. The western shore and slopes are largely undeveloped, with the dense vegetation and the Snout's skyline dominating this side of the bay.

4.3 *Natural Character*

Natural character describes the apparent 'naturalness' of a landscape. The level of natural character within an area depends on:

- The nature and extent of modifications to the landscape/seascape (coastal environment),
- The extent to which natural elements, patterns and processes occur.

The highest level of natural character (greatest naturalness) occurs where there is least modification.

Potential effects on the natural character of the coastal environment are pertinent to this assessment. In landscape terms, the coastal environment includes all of the Waikawa Bay landscape comprising the skylines, slopes, shoreline and sea surface.

The hill slopes and ridgelines of the bay are inherently more visible than the water surface and shoreline due to their higher elevation and relatively vertical nature. The visibility of various parts of the bay is also dependent on the elevation of the view point. From low elevations (such as on the shore from the marina or from the water), the sea surface and shoreline are viewed at a flat angle, revealing little detail of the water surface, while the hill slopes beyond provide an elevated backdrop and are more readily visible. Consequently, when viewed from low elevations any development on the slopes will be more visually apparent than changes on the water surface and shoreline. Viewing from a higher elevation, such as Port Underwood Road, reveals a larger area of sea surface, and from such locations changes occurring on the water will be more apparent than they are from lower viewing elevations.

Photographs 1-3 in Figure 3 illustrate the existing context and character of Waikawa Bay, which is described below. These photographs show Waikawa Bay at one time, on one day of the year. The nature of the bay is very dynamic with vessels continually coming and going and ever changing atmospheric conditions.

The Snout (Western Shore)

The northern part of the Snout landform, beyond the existing marina, exhibits a high level of natural character. The consented subdivision will modify the northern end of the landform. However, consent conditions for the subdivision include several measures intended to minimise the impact of the dwellings in the landscape. If the establishment of dwellings, the jetty and cable-car is implemented in accordance with the proposal, the area in general will still maintain a relatively high level of natural character. The dense native vegetation on the slopes would be retained and continue to regenerate, over time enveloping the dwellings and remaining as the dominant element on the Snout landform.

The slopes, shoreline and water surface at the southern end of the Snout are modified by the marina, carparking, roads and moored vessels. Several existing and recently established houses with access roads and large cuts are prominent elements on parts of the lower slopes. Cleared areas and groups of exotic trees (eucalyptus and pine) around the dwellings further accentuate the fragmentation of the otherwise continuous vegetation cover on the slopes. However, the regenerating native vegetation is largely intact outside these disturbed areas. The regeneration of the native vegetation on these slopes is less advanced than the northern end of the Snout, with a broken tree canopy, and areas of gorse in places. Consequently, the southern part of the Snout landscape/ seascape exhibits a lower level of natural character than the northern part.

The head of the bay has a very low level of natural character due to the substantially modified nature of the shoreline, including reclamation, the marina, car parks, and associated commercial buildings and facilities, and a higher concentration of moored vessels.

Eastern Shore

The eastern side of Waikawa Bay has a moderate level of natural character. Residential development and modification of the slopes are largely concentrated on the lower slopes

below Port Underwood Road and near the waterline, including houses, boatsheds, jetties and moored vessels. Development is most dense toward the head of the bay.

Above Port Underwood Road, north of the main Waikawa settlement, recent road and building platform excavation associated with residential development has added to the modified nature and fragmentation of the slopes.

The regeneration of vegetation on these drier north-facing slopes is less advanced than the slopes across the bay on the Snout. The vegetation here is a mosaic of regenerating native vegetation and exotic pest species such as gorse. Wilding pine trees are a dominant element of the vegetation and detract from the naturalness of the slopes.

Natural Character Summary

The head of the bay and inner bay, are highly modified with areas of reclaimed coastal edge, car parks, roads, medium density buildings, breakwaters, berthing structures, moored vessels and continual boating activity. In contrast, the outer bay has a higher level of natural character with a lower density of structures and activity. The northern part of the Snout headland has high natural character with the slopes dominated by regenerating native vegetation, and a low density of structures. The eastern shore has a moderate level of natural character with a higher density of houses toward the head of the bay and close to the shoreline.

4.4 Visibility

Waikawa Bay is visible to a relatively large viewing population, including both transient and resident populations. The viewing audience is made up of:

- Waikawa Bay residents,
- Port Underwood Road users,
- Recreational users of Waikawa Bay, and its shoreline,
- Boat and marina users,
- Inter-Island Ferry passengers.

Of these groups, the marina and inner bay are most visible to those at close proximity and at elevated positions (Waikawa Bay residents, and Port Underwood Road users).

The most accessible land-based viewpoints are at, or slightly elevated above, sea level, enabling low-angle views of the bay (e.g the Waikawa Bay beach and breakwater). At higher elevations, such as Port Underwood Road (which varies from 10m to 40m above sea level), a larger area of water surface is visible.

Elevated views from Port Underwood Road potentially offer the best views of the bay and proposed mooring areas. However, vegetation on the roadside and slopes below the road obscure all but brief glimpses of the bay, including the embayments and Beeches Bay.

From the most frequented land based locations within the bay (the southern and eastern shores), the Waikawa Marina and inner bay are viewed in the context of the Snout landform, the western shore and the open water of the outer bay.

5 VISUAL AND NATURAL CHARACTER ASSESSMENT

5.1 Methodology

This assessment is based on a number of site visits, which included fieldwork in the local area, and a review of the computer generated visual simulations prepared from representative public viewpoints.

5.2 Visual Simulations

Visual simulations are a tool used to predict how the proposal is likely to appear in terms of location, style, and general appearance. Given this is a plan change and there is no actual detail or design of what could eventually be developed in the marina zones, assumptions have been made in the preparation of the simulations which are based on an indicative marina design prepared by International Marina Consultants. The simulations have been prepared on the assumption that any extensions to the marina would appear similar in nature and scale to the existing marina. Each simulation has been developed showing the mooring management areas fully occupied with vessels, in addition to the existing and proposed Marina Zone area being fully developed and occupied. This therefore presents a 'worst case' scenario, and in reality the number of vessels which would be in the Bay is likely to be less than shown for most of the time. Further, the simulations present a 'snapshot' of the Bay at a certain time. They do not therefore depict the dynamic nature of moored vessels which come and go for varying periods of time in any one day, month or year.

Viewpoints for the simulations were selected to represent a range of viewing angles and elevations from publicly accessible viewpoints, and are representative of the largest viewing audience group. Three viewpoints were selected and their locations are shown on Figure 1. The methodology for preparing the simulations is attached in Appendix A.

In addition to three day-time simulations, two night-time simulations have been prepared to provide an indication of how the potential marina extensions may appear at night. Simulating the illumination and reflection of light off the water surface is inherently difficult, and a detailed lighting plan has not been prepared. Therefore the brightness and reflectance of light in these simulations have been based on observations of lighting levels at Havelock marina. Consequently, these simulations are only indicative.

5.3 Visual Assessment

The daylight visual simulations have been prepared for the three viewpoints (Figures 4, 5&6), and the night time simulations from 2 viewpoints (Figures 7&8)

Each figure has two images:

- o The first image is the existing view of the marinas and typical mooring density.
- o The second image shows the scenario that could eventuate as a result of the proposed plan change, including a possible marina extension (northwest) and the defined Mooring Management Areas (discussed previously in Section 1.1). The second image also shows the existing marina zone (northeast) as a fully developed and occupied marina. The visual assessment is therefore based on a 'worst case' scenario, which is likely to be long term proposition.

The visual effects of the proposal from each of the viewpoints are discussed in the following table.

Viewpoint Location	Visual Assessment
<p>Figure 4 Cooks Ridge</p>	<p>This viewpoint provides an elevated view of the inner bay and marina. Marina extensions would increase the visual presence of the marina in the bay and appear more dominant than it is currently. While this visual change would be noticeable, the scale of the marina extensions would not be disproportionate to the scale of the landscape backdrop of the Snout landform and open water in the bay.</p> <p>Establishment of the mooring areas will intensify the moorings along both shores but leave the central part of the bay open.</p>
<p>Figure 5 Marina View</p>	<p>The Snout shoreline is predominantly free of development and together with its vegetated slopes and skyline provides a relatively 'natural' backdrop.</p> <p>A marina extension (northwestern) and the proposed mooring management area on the far western shore would occupy all of the Snout shoreline visible from this location. This, combined with the consented subdivision at the northern end of the Snout, would result in a continuum of scattered development along all of the Snout landform. The cumulative effect of this would be to reduce the natural character of the Snout landform.</p> <p>The proposed mooring management area in the foreground would result in a higher concentration of vessels extending further out into the bay from the near shore, resulting in a more 'visually cluttered' water surface, as viewed from this elevated position.</p>
<p>Figure 6 Waikawa Road</p>	<p>A marina extension at the northwest will be less visible from this location, due to the distance and screening by the intervening moored vessels.</p> <p>From this viewpoint on the shore, the vessels moored in the proposed mooring management areas would appear very similar to the existing situation.</p>
<p>Figure 7 Waikawa Road (night)</p>	<p>The combined lights of both potential marina extensions would result in a longer ribbon of lights extending out into the bay. Lights on a northwest marina extension would be more distant and less prominent than lights on a northeast marina extension which is closer to the viewpoint.</p>
<p>Figure 8 Cooks Ridge (night)</p>	<p>This elevated location provides oblique views down onto the marina with the pattern of lights revealing the alignment of the marina finger warves. The extensions will create a longer ribbon of light that, from this angle, will appear about twice as long as it does currently.</p>

5.4 Visual Effects

Potential Marina Extension

A potential new marina in the proposed northwest marina zone extension would be viewed most commonly from the southern and eastern shores of the bay with the Snout

landform providing a backdrop. Development of a marina in this area would be apparent from most locations around the bay, as it would extend along the western shore, generally across the line of view from most viewpoints. The marina would appear as a continuation of the existing marina; extending the horizontal band of development further along the Snout shoreline. (see Figures 4-6)

From most locations a northwest marina extension would be viewed from a distance, where it would be a small part of the wider bay landscape. Some residents in the bays on the eastern shore such as in Beeches Bay, would not currently have views of the existing marina due to the orientation of their dwellings. However, a new marina located at the northwest marina zone extension is likely to be visible to more of those residents.

A new marina would not introduce a new visual element into the bay. The existing Waikawa Bay seascape/landscape comprises a combination of moored vessels, marina structures and vessels, and enclosing landforms with varying levels of development. The water area of the bay is a dynamic seascape changing daily and seasonally, as vessels come and go, and as the light and weather conditions change. Moored vessels and the activity they create are part of the existing environment.

The proposed rezoning is relatively remote from the most intensively developed head of the bay which has a distinct industrial character. The Marina zoning allows buildings up to 10m height. Therefore, any future marina development this far along the Snout needs to be designed to respect the relatively undeveloped character of the adjacent slopes and outer bay area. That is to say, a large building or tall structures established as part of a marina reclamation would be out of place in this location, and potentially visually significant. However, a sensitively designed marina extension would not have significant visual effects.

The likely appearance of lights at night is indicated in the two night simulations (Figures 7&8). It is anticipated that the lights would be of similar intensity to the existing marina. Additional lights as part of an extension to the marina will increase the length of the ribbon of lights across the darkness of the bay at night. While this would be noticeable it would not detract from the night-time character of the bay. The additional lights would be minor in relation to the existing extent of lighting in the bay as both the existing marina and the residential development on the eastern slopes create a moderate level of lighting.

As any new marina development will require a resource consent for a discretionary activity, a full and thorough assessment of effects should be carried out at this time. This process needs to ensure that only marinas that are appropriately designed for this particular site will be approved, and if required conditions may be imposed to mitigate effects.

If developed to a similar scale and nature to the existing marina (primarily berthed vessels), the visual effects of a new northwest marina would be minor when considered in the context of the wider bay landscape. In particular its adjacency to the existing marina development would visually anchor it to the more densely developed head of the bay.

Mooring Areas

The plan change will establish Mooring Management Areas within Waikawa Bay, which will essentially retain a similar number of moorings but relocate them within the bay, in a denser configuration. This rearrangement/relocation of moored vessels, would result in an insignificant visual change to the appearance of, and activity on, the water.

While redistribution of the moorings may be apparent from some locations, from many places the visual change would be indistinguishable. The altered appearance would be most apparent to residents of the bay who know it well. The apparent change to the eastern side and inner part of the bay would be noticeable from higher elevations but given the existing context of this part of the bay, dominated by the marina and moored vessels, the change would be insignificant.

The proposed mooring management area on the west side of the bay would result in more noticeable visual change, (than the mooring areas on the eastern side of the bay), as it provides for a group of vessels in what is now unoccupied water space, along the shoreline of the bay which is easily visible, albeit at a distance. This group of moored vessels would appear as a very low density form of development occupying a narrow visual band at the shoreline. If combined with a potential northwest marina extension, together the possible developments would extend some form of development from the inner bay along the Snout shore to where the consented nine dwelling development is located.

While the proposed mooring areas would reduce the open water area of parts of the bay and part of the Snout, the majority of the central part of the bay would be retained as open water. Overall, relocation of the existing moorings to the defined mooring areas would have effects that were indistinguishable or less than minor from most locations. In addition, the plan change would provide certainty that this was the maximum extent and density of moorings that could be established in the bay.

The visual change and change to the character of the bay resulting from the proposed mooring areas would be less than minor given the existing context and nature of the existing activities in the bay.

5.5 Natural Character

The magnitude of effects on natural character of the coastal environment is determined by the nature and scale of change in relation to the existing natural character of the coastal environment.

Waikawa Bay has a mixed level of natural character. The inner bay area is highly modified, with a low level of natural character, and therefore has the potential to accommodate more change than the less modified areas such as the northern end of the Snout where there is little modification. The eastern shore of the bay has a moderate level of natural character, and the head of the bay and inner bay has a lower level of natural character.

The proposed mooring areas on the eastern side of the bay would not change the existing natural character of the bay.

Development of the northwest Marina zone would require reclamation of an un-modified section of the shoreline. The immediate localised effects on the natural character of the affected shoreline area would be significant, albeit on a relatively short section of shoreline (470m).

Development of the northwest marina zone, combined with the existing marina and the proposed mooring area, would extend development along much of the Snout shoreline where currently very little development exists. This development however, would be confined to the water surface and immediate shoreline, and would not impact on the adjacent slopes. This ribbon of development would extend to the southern end of the consented subdivision at the northern end of the Snout.

The effects of the plan change would incrementally reduce the natural character of the Snout's coastal environment, which will also be reduced by the consented subdivision. However, even with this cumulative impact, the Snout will retain a relatively high level of natural character due to the change in use being confined to the immediate shoreline and water space.

In terms of the natural character of the coastal environment it seems preferable to consolidate new marina development where existing marina activity already exists rather than create new marinas in as yet undeveloped or less developed parts of the Marlborough Sounds. Marina activity is well established at the head of Waikawa Bay, and a carefully designed marina extension adjacent to this would be an appropriate development option.

5.6 Cumulative Effects (visual and natural character)

The plan change proposes to extend the existing marina and mooring activities further into the bay. The effects of the potential development, resulting from the plan change, on the bay's water space need to be considered in the context of the proposed and potential activities that may occur on the adjoining land and existing marina zone.

If a marina is developed in the existing northeast marina zone as well as in the proposed northwest marina zone, this would approximately double the area of developed marina on the bay. While this change would be plainly obvious in plan view, the combined marinas would typically be seen from low elevation viewpoints where they are viewed at an oblique angle making the scale of the extensions less apparent. (see Figures 4-6). The combined landscape and visual effects of both potential marina extensions would not be significantly more than if just the north west extension was developed.

Development of the slopes enclosing the bay is continuing, as evidenced by the recently consented subdivision on the Snout and on-going residential development on the eastern slopes and at the head of the bay. Collectively, the on-going residential development and potential Marina zone extension resulting from the proposed plan change will incrementally reduce the natural character of the bay over all. However, the plan change would provide for a development pattern in Waikawa Bay that is consistent with the existing pattern of the marinas and moored boats. The potential extension to the marina zone would consolidate marina activity at the head of the bay and along the western shore. Concentrating the proposed marina activity to a single part of the bay immediately adjacent to the existing marina infrastructure is preferable to disbursement of marina development to other areas within Waikawa Bay and probably other parts of the sounds.

In the context of the Waikawa Bay environment, where marina and mooring activities dominate the inner bay, the nature and scale of the plan change proposal would be appropriate in the existing environment.

5.7 Plan Provisions

The proposed plan change is consistent with the MSRMP natural character and landscape provisions outlined in Section 2.0 of this report. Development resulting from the plan change would build on existing marina infrastructure in the bay. The nature and scale of the resulting development would be appropriate to the existing environment which is a dynamic and evolving landscape.

6 COMMENTS- FUTURE CONSENTING OF MARINA DEVELOPMENT

Development of a marina in the proposed Marina Zone would have a Discretionary Activity status, requiring an assessment of the potential visual and landscape effects of any proposal. This would be an effective process to consider the appropriateness of a specific proposal, in the proposed marina zone.

The scale and character of this particular part of the bay (the proposed marina zone) is different to where the current marina zone is. It is more isolated from the intense development at the head of the bay and is easily viewed from surrounding locations. Consequently, the landscape and visual aspects of any proposal will be specific to the location and context and will therefore need detailed consideration at the resource consent stage.

7 CONCLUSIONS

Marina and boating activities dominate the inner bay, and marina activity already extends some way along the western shore. The plan change seeks to expand on the existing development pattern, consolidating development at the head of the bay and along the western shore, rather than disperse it to other parts of the bay or other bays in the Sounds.

If all the existing and proposed Marina zone area were developed as marina (along the lines of the existing marina, and indicative marina layout) and the proposed mooring areas established, the natural character of the bay would be reduced, but the change would not be significant in relation to the existing natural character and ongoing development of the bay. Similarly the visual effects resulting from the plan change would be less than minor.

Boffa Miskell Ltd
February 2010

Bron Bennetts

Principal
Registered NZILA Landscape Architect

APPENDIX A - PREPARATION OF VISUAL SIMULATIONS

High resolution digital photographs were taken from each of the viewpoints and their GPS locations recorded. A 3D wireframe model of the existing landform and sea, using detailed contour information, was then generated. The proposed marina extensions were then placed into this model at the locations specified on the scheme plans. The GPS coordinates for each viewpoint were also added to the model.

Using the same focal length parameters as that of the camera, an image of the 3D wire frame was then generated for each viewpoint. This was then registered over the actual photographs, using known reference points to bring the two together. The marina extensions were then rendered in the photographs based on the existing marina structures and boats.

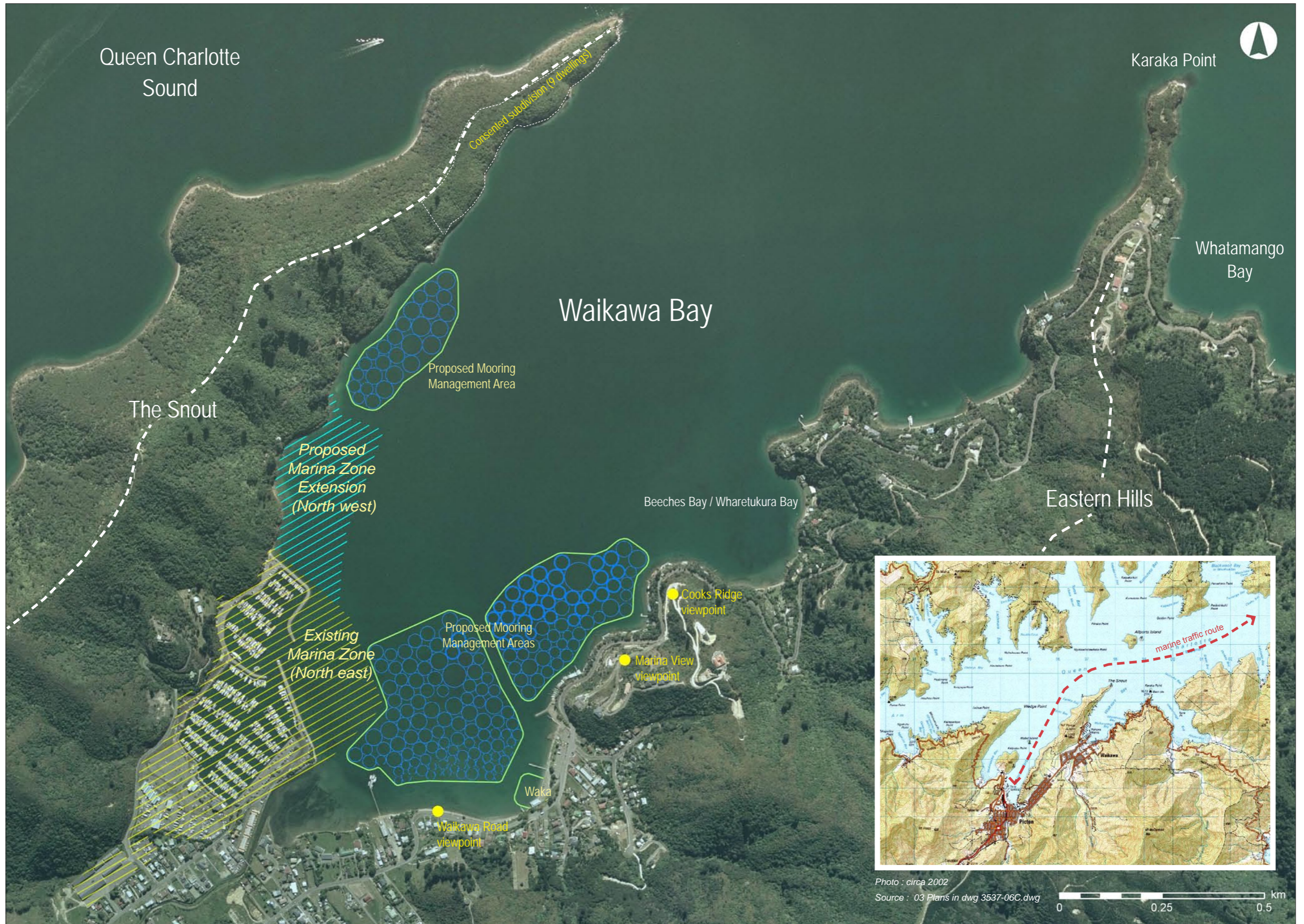
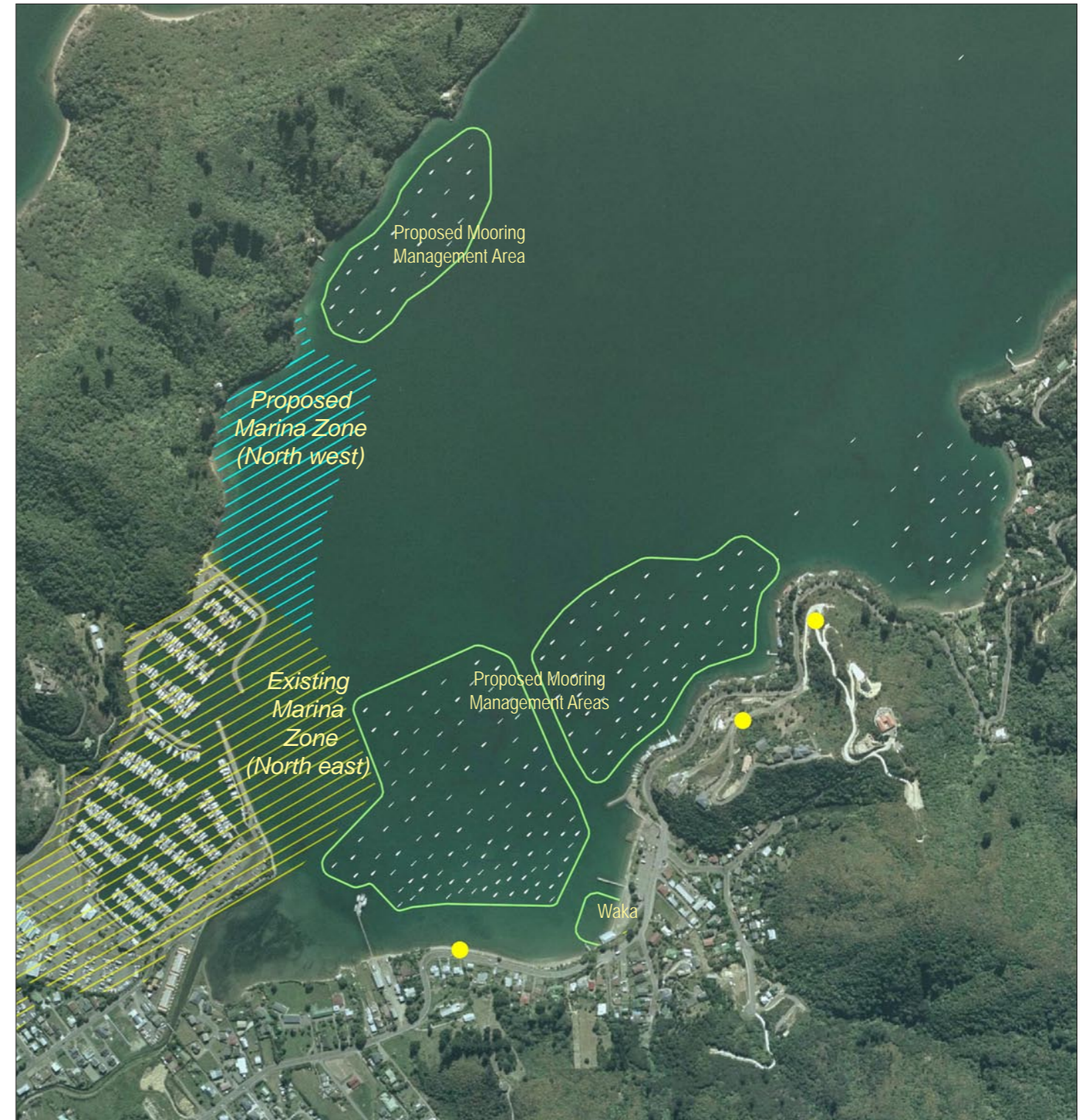


Photo : circa 2002
 Source : 03 Plans in dwg 3537-06C.dwg



Existing situation (potential)
Currently proposed and Consented Moorings (vessels on all moorings)



Proposed Mooring Management Areas (Jan 2010)
(vessels on all moorings)

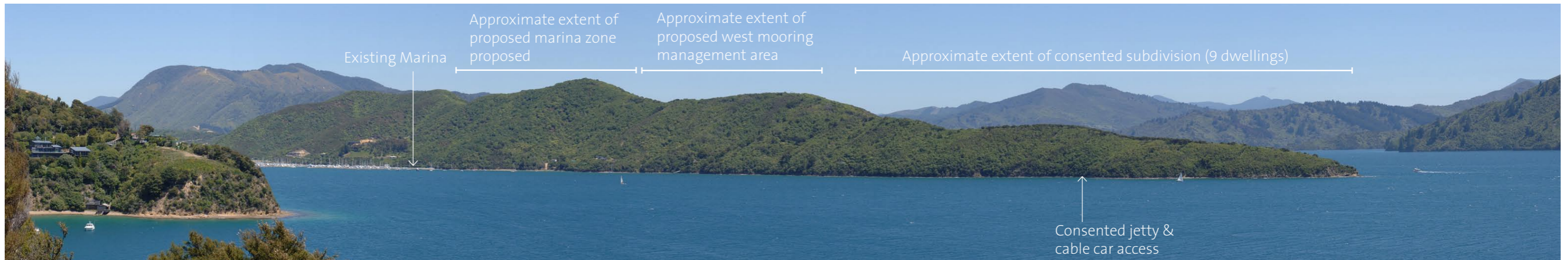
Photo : circa 2002
 Source : 03 Plans in dwg 3537-06C.dwg



Residential development on the eastern side of the bay is concentrated on the lower slopes, near the shoreline and at the head of the bay. Recent subdivisions such as Cooks Ridge are located higher up the slopes, than the more traditional development pattern that follows the shoreline and Port Underwood Road. (Photography 20.11.08)



By contrast the western slopes of the bay are less modified than the eastern slopes (pictured above). The marina has highly modified the head of the bay close to the shoreline. Recent residential development, where vegetation has been cleared and groups of exotic trees, above the marina, are dominant elements on the lower slopes toward the head of the bay. (Photography 20.11.08)



The northern end of 'The Snout' (right) currently has a high degree of natural character with very little modification and a continuous cover of native regenerating forest on the slopes from the skyline to the shore. The consented nine dwelling subdivision, including a jetty and cable car, is intended to have low visual impact and will bring an element of development to the northern end of the peninsula. The southern end of the Snout (left) has a lower degree of natural character with modifications such as the marina and residential development on the lower slopes. (Photography 20.11.08)



Existing Situation showing typically moored vessels (November 2007)



Potential layout showing potential marina extensions, and indicative vessels in mooring management areas (Jan 2010)

Note: The simulation shows the mooring management areas at full capacity. In reality, it is unlikely that all of the moorings would be occupied all of the time.

VIEWPOINT DETAILS	
NZMG Easting	: 2 598 033 mE
NZMG Northing	: 5 993 206 mN
Elevation	: 40 m (approx)
No of Photos in Simulation	: 8
Included View Angle	: 100°
Date of Photography	: 9:10am 20 November 2007
Source	: 03 Plans in dwg 3537-06C.dwg



10 June 2010



Existing Situation showing typically moored vessels (October 2008)



Potential Layout showing potential marina extensions, and indicative vessels in controlled mooring areas (Jan 2010)

Note: The simulation shows the mooring management areas at full capacity. In reality, it is unlikely that all of the moorings would be occupied all of the time.

VIEWPOINT DETAILS	
NZMG Easting	: 2 597 915 mE
NZMG Northing	: 5 993 054 mN
Elevation	: 40 m (approx)
No of Photos in Simulation	: 12
Included View Angle	: 120°
Date of Photography	: 9:30am 8 October 2008
Source	: 03 Plans in dwg 3537-06C.dwg





Existing Situation showing typically moored vessels (October 2008)



Potential Layout showing potential marina extensions, and indicative vessels in mooring management areas (Jan 2010)
 Note: The simulation shows the mooring management areas at full capacity. In reality, it is unlikely that all of the moorings would be occupied all of the time.

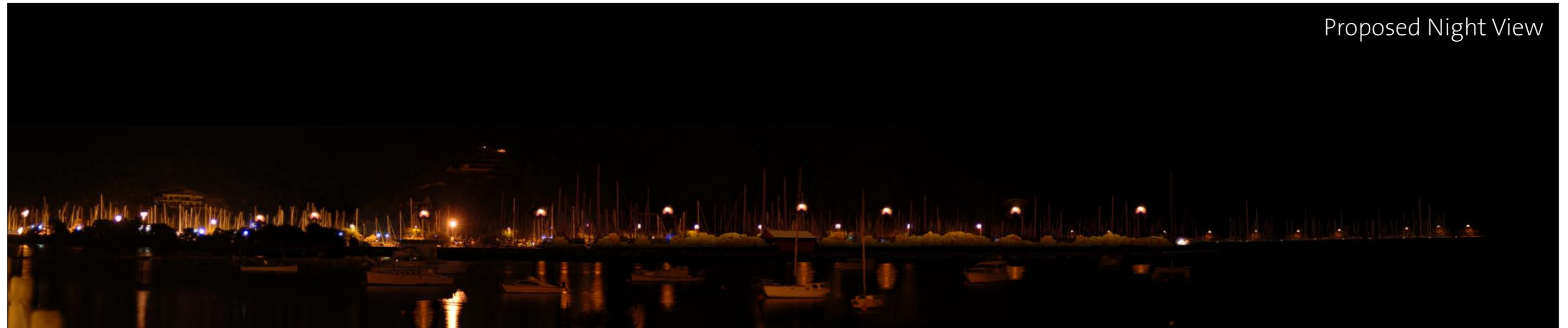
VIEWPOINT DETAILS	
NZMG Easting	: 2 597 459 mE
NZMG Northing	: 5 992 684 mN
Elevation	: 5 m (approx)
No of Photos in Simulation	: 8
Included View Angle	: 145°
Date of Photography	: 9:50am 8 October 2008
Source	: 03 Plans in dwg 3537-06C.dwg



Proposed Day View

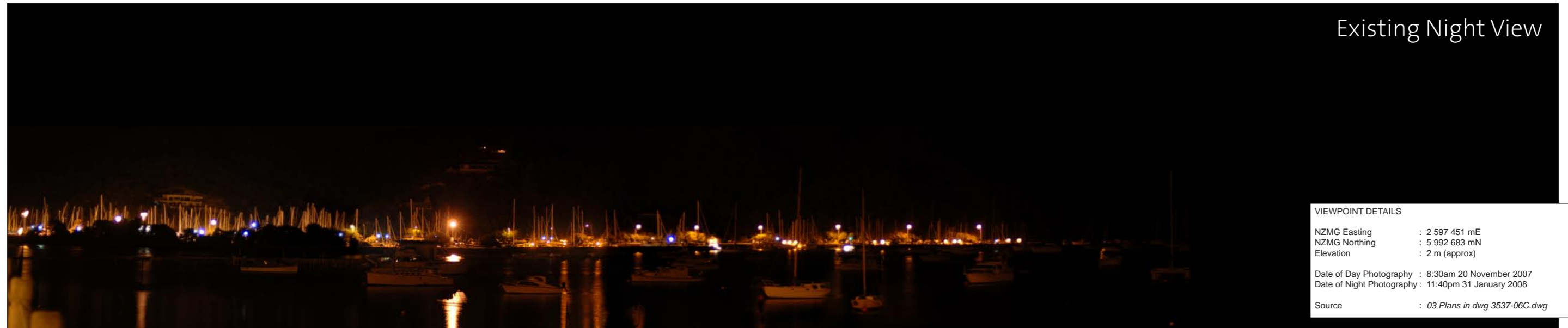


Proposed Night View



Proposed Views are indicative only - The location and nature of the lighting fixtures is based on indicative plans prepared in 2008, the level of illumination and reflection is based on observations of similar lighting levels at the Havelock marina

Existing Night View



VIEWPOINT DETAILS	
NZMG Easting	: 2 597 451 mE
NZMG Northing	: 5 992 683 mN
Elevation	: 2 m (approx)
Date of Day Photography	: 8:30am 20 November 2007
Date of Night Photography	: 11:40pm 31 January 2008
Source	: 03 Plans in dwg 3537-06C.dwg

Proposed Day View



Proposed Night View



Proposed Views are indicative only - The location and nature of the lighting fixtures is based on indicative plans prepared in 2008 , the level of illumination and reflection is based on observations of similar lighting levels at the Havelock marina

Existing Night View



VIEWPOINT DETAILS	
NZMG Easting	: 2 598 033 mE
NZMG Northing	: 5 993 206 mN
Elevation	: 40 m (approx)
Date of Photography	: 9:10am 20 November 2007
Date of Night Photography	: 12:15am 1 February 2008
Source	: 03 Plans in dwg 3537-06C.dwg

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