

BEFORE THE OTAGO REGIONAL COUNCIL

File No: 2010:193

IN THE MATTER

Of the Resource Management Act 1991

AND

IN THE MATTER

**Of Applications by Port Otago Limited for
resource consents for Project Next Generation**

**Statement of Evidence of Francis Bruce Hill
On Behalf of the Director-General of Conservation**

Department of Conservation

Otago Conservancy

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Brief of Evidence of Bruce Hill

Introduction

1. My name is Francis Bruce Hill. I am employed by the Department of Conservation, Otago Conservancy as a Conservation Officer- Resource Management Act Planning.
2. I have a Masters of Science in Resource Management, am a graduate member of the New Zealand Planning Institute and have worked for the Department of Conservation for 10 years.
3. I have worked for the Department in a variety of roles, including private land protection initiatives, statutory land management, and representing the Department during the tenure review of pastoral leases.
4. For the last five years I have worked in my current role as Otago Conservancy's Resource Management Act planner.
5. I have read and agree to comply with the Expert Witnesses – Code of Conduct for the Environment Court (Consolidated Practice Note 2006).
6. This evidence is in within my area of expertise except where I state otherwise. I have not omitted to consider material facts known to me that alter or detract from the opinions that I express.

Scope of Evidence

7. As the counsel for the Director-General of Conservation (Director-General) explained, the Director-General has reached agreement with Port of Otago Limited over a set of resource conditions that both parties request be incorporated as conditions for the appropriate consents, should these be granted. I wish to explain how this agreement resolves the concerns the Director-General raised in his written submissions.
8. In his written submissions on the applications by Port Otago Limited to the Otago Regional Council (ORC) for the Next Generation Project enabling

consents (hereby termed the Application), the Director-General identified his concerns with this.

9. These concerns were focused on the lack of relevant information provided by Port Otago Limited in their Assessment of Environmental Effects.
10. Since lodging these submissions, Department and Port Otago Limited staff have been in discussion about how to remedy these deficiencies. Subsequently Port Otago Limited has provided additional information and has also committed to actions as detailed in the mutually agreed-to proposed resource consent conditions and amendments to consent conditions as detailed in Appendix 1 of my submission.
11. With this additional information and the agreement made with Port Otago Limited the Director-General is satisfied that his concerns have been resolved.
12. These proposed and amended conditions as contained in Appendix 1 are numbered 1- 13. Beside each condition I have indicated what consent each condition is applicable to and what section of the Resource Management Act 1991 (the RMA), as per the Director-General concerns as described in his written submission each condition remedies.
13. I have indicated via underline where additional text has been agreed to by both the Director-General and Port Otago Limited and likewise ~~striketrough~~ shows mutually agreed to deletions.
14. For example, I consider that should consent 2010.193 be granted, that if Condition 2 as described in Appendix 1 (and detailed below) is given full effect in this consent then the Director-General's concerns about the potential adverse effect of dredging on Taiaroa Head and the significant habitat of indigenous fauna which within that area will be remedied, by the agreed to prohibition on dredging in the periods described below.

CONDITION 2- consent 2010.193, RMA s6(c)

The consent holder shall not undertake Incremental Capital Works or Major Capital Works in the area adjacent to Taiaroa Head, and shown in Appendix 5 of this consent, between 1 October to 30 November and 1 January and 14 February of each year, except with

the approval of the Consent Authority who will have particular regard to the views of the Department of Conservation.

15. Please note that the condition numbers indicated in Appendix 1 refer to the version of these consents as described in the ORC RMA s42a report and hence this numbering may well change should consent be granted.
16. For example, the final section of Condition 8 in Appendix 1 (defined below) refers to reports that are to be produced as a requirement of specified consent conditions. :

The reports described in 1a) above are those specified under the conditions of the following consents.

- a) *2000.472 VI, condition 12;*
- b) *2010.193, conditions 19 and 23;*
- c) *2010.194, conditions 11 and 14;*
- d) *2010.195, conditions 13, 14, 15; and*
- e) *2010.198, conditions 10, 11, 13, 14 and 15.*

17. If these condition numbers are altered, so that the agreement between Port Otago Limited and the Director-General can be given full effect I request that this part of this condition and any other similarly affected conditions be altered accordingly.

Statutory Considerations

18. The Director-General's concerns can be categorized by the relevant sections of the RMA Part 2, being sections
 - a) 5(2)(a), 5(2)(b) and 5(2)(c);
 - b) 6(c); and
 - c) 7(aa), (d), (f) and (g) respectively.
19. I wish to firstly comment on the Director-General's RMA section 6(c) concerns.

RMA Section 6(c)

20. In summary the RMA section 6(c) concerns raised by the Director-General in his written submissions are as follow:

- Lack of adequate protection, due to lack of adequate information, for significant habitats of indigenous fauna. This fauna includes several species of marine mammals, a large number of species of seabirds and a threatened brachiopod. These significant habitats include Public Conservation land at Taiaroa Head, and that encompassed in the Aramoana Ecological Area.
- Other significant habitats/areas of significant indigenous flora include the area between and offshore of Cape Saunders and Cornish Head; the extensive macrocystis and other algae beds on rock reefs between Taiaroa Head and Shag Point; and sensitive ecosystems within Otago Harbour outside of those contained within the Aramoana Ecological Area.

21. The specific objectives referred to by the Director-General in his submission to the Otago Regional Council (ORC) that are relevant to s6(c) of the RMA are as follow.

22. New Zealand Coastal Policy Statement 1994 policy 1.1.2.

1.1.2: It is a national priority for the preservation of the natural character of the coastal environment to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna in that environment by:

(a) avoiding any actual or potential adverse effects of activities on the following areas or habitats:

(i) areas and habitats important to the continued survival of any indigenous species; and

(ii) areas containing nationally vulnerable species or nationally outstanding examples of indigenous community types;

(b) avoiding or remedying any actual or potential adverse effects of activities on the following areas:

- (i) outstanding or rare indigenous community types within an ecological region or ecological district;*
- (ii) habitat important to regionally endangered or nationally rare species and ecological corridors connecting such areas; and*
- (iii) areas important to migratory species, and to vulnerable stages of common indigenous species, in particular wetlands and estuaries;*

(c) protecting ecosystems which are unique to the coastal environment and vulnerable to modification including estuaries, coastal wetlands, mangroves and dunes and their margins; and

(d) recognising that any other areas of predominantly indigenous vegetation or habitats of significant indigenous fauna should be disturbed only to the extent reasonably necessary to carry out approved activities.

23. ORC Regional Policy Statement Objectives.

- 10.4.1. *To maintain and enhance the life-supporting capacity and diversity of Otago's biota.*

24. ORC Regional Plan: Coast for Otago Objectives

- 9.3.1. *To recognise and provide for values associated with:*
 - a) *Areas of cultural significance; and*
 - b) *Areas of conservation value; and*
 - c) *Areas of public amenity;*

When considering any alteration of the foreshore or seabed within the coastal marine area.

25. I consider that should consents be granted, that both the inclusion of and the giving of the full effect to:

- a) Conditions 2 and 3 in consent 2010.193;

- b) Condition 5 in consent 2010.198; and
- c) Conditions 8, 9 and 10 in consent 2010.198.

That areas of significant indigenous flora and significant habitats of indigenous fauna will be avoided and/or better identified, therefore providing an means for the avoidance of any actual or potential effects on such areas, and/or any such effects being remedied or mitigated.

RMA Section 7(aa)

- 26. In summary the RMA section 7(aa) concerns raised by the Director-General in his written submission were the actual and potential adverse effects of sedimentation and/or siltation on both significant fauna and flora.
- 27. The specific objectives referred to by the Director-General in his submission to the ORC that are relevant to s7(aa) of the RMA are as follow.
- 28. New Zealand Coastal Policy Statement 1994 policy 1.1.4.

Policy 1.1.4

It is a national priority for the preservation of natural character of the coastal environment to protect the integrity, functioning, and resilience of the coastal environment in terms of:

- (a) the dynamic processes and features arising from the natural movement of sediments, water and air;*
- (b) natural movement of biota;*
- (c) natural substrate composition;*
- (d) natural water and air quality;*
- (e) natural bio diversity, productivity and biotic patterns; and*
- (f) intrinsic values of ecosystems.*

- 29. ORC Regional Policy Statement objectives.

- 8.4.1. *To promote the sustainable management of Otago's coastal resource in order to meet the present and reasonably foreseeable needs of Otago's people and communities.*
 - 8.4.4 *To seek to maintain existing water quality within Otago's coastal waters and where water quality is degraded, to seek to achieve water quality suitable for contact recreation and the eating of shellfish.*
30. ORC Regional Plan: Coast for Otago Objectives
- 5.3.1. *To provide for the use and development of Otago's coastal marine area while maintaining or enhancing its natural character, outstanding natural features and landscapes, and its ecosystem, amenity, cultural and historic values.*
 - 10.3.4. *To enhance water quality in:*
 - a) *Coastal protection areas; and*
 - b) *Coastal recreation areas; and*
 - c) *Areas adjacent to marine mammal or bird sites; and*
 - d) *Areas where there is a direct discharge containing human sewage; and*
 - e) *Areas where there is a direct discharge of wastes from commercial, industrial or production activities.*
 - 12.3.1 *To manage and control noise levels within the coastal marine area to minimise any adverse effect on amenity values, conservation values and the use of the coastal marine area.*
31. I consider that should consents be granted, that the inclusion and the giving of the full effect to:
- a) Condition 1 in consents 2010.193, 195 and 198;
 - b) Condition 4 in consent 2010.195;
 - c) Conditions 6 and 7 in consent 2010.198;

d) Condition 8 in consents 2000.472_VI and consents 2010.193-198 inclusive; and

e) Conditions 9, 10, 11, 12 in consent 2010.198:

That the ethic of stewardship will be given particular regard as in combination these conditions will enable the gathering and analysis of the necessary information and the implementation of any resulting actions necessary to give actual effect to this ethic.

RMA Section 7(d), (f) and (g)

32. In summary the RMA section 7(d), (f) and (g) concerns raised by the Director-General in his written submissions were that the application as lodged failed to have regard to the maintenance and enhancement of the environment, the intrinsic values of ecosystems and the finite characteristics of natural and physical resources.

33. The specific objectives referred to by the Director-General in his submission that are relevant to these sections of the RMA are as follow.

34. ORC Regional Policy Statement Objectives

- 8.4.2. *To maintain and enhance the health and diversity of Otago's existing coastal ecology.*
- 13.4.1 *To protect Otago's communities, environment and natural resources from the adverse effects of the waste stream.*

35. ORC Regional Plan: Coast for Otago Objectives

- 10.3.3. *To safeguard the life-supporting capacity of Otago's coastal marine area.*
- 10.3.5 *To consider the adverse effects associated with a discharge of contaminants to the coastal marine area relative to the adverse*

effects associated with the discharge of the same material to other receiving environments.


36. I consider that should consents be granted, that the inclusion of and the giving full effect to:
- a) Condition 8 in consents 2000.472_VI and 2010.193-198 inclusive;
 - b) Conditions 9, 10, 11, 12 and 13 in consent 2010.198;

Will enabling the gathering and analysis of information necessary to enable particular regard to be had to:

- i. How to maintain and enhance the portion of the environment influenced by the Next Generation Project;
- ii. Gaining a comprehensive understanding of the intrinsic values of the relevant ecosystems; and
- iii. How to sustainably manage the relevant finite characteristics of the relevant natural and physical resources in a manner that avoids, remedies or mitigates any actual or potential adverse effect.

Conclusion

37. In summary, the concerns raised by the Director-General in his written submission on the Application by Port Otago for the Next Generation Project enabling consents, including those relevant to RMA s2(a), s2(b) and s2(c) have been resolved.
38. This resolution is by the agreement reached by the Director-General and Port Otago Limited that if these enabling consents are granted, that the conditions contained in Appendix 1 of my submission are given full effect in the resulting conditions.
39. Thank you for taking the time to hear my evidence.



Bruce Hill

Dated 15th April 2011

APPENDIX 1

CONDITION 1- consent 2010.193, 195, 198, RMA s7aa

For the purposes of these conditions the following definitions apply:

- (a) “Incremental Capital Works” means dredging and ancillary works using trailing suction dredges each with a capacity of no more than 1000 cubic metres and/or a grab dredge or back hoe with capacities each of no more than 10 cubic metres, and includes maintenance dredging that is otherwise not permitted by the Regional Plan: Coast and a resource consent for disposal of maintenance dredging material, provided that the total annual quantity of dredge material from Incremental Capital Works is no more than 1.45 million cubic metres.
- (b) “Major Capital Works” means dredging and ancillary works that are not Incremental Capital works or part of the Maintenance Programme.

CONDITION 2- consent 2010.193, RMA s6(c)

The consent holder shall not undertake Incremental Capital Works or Major Capital Works in the area adjacent to Taiaroa Head, and shown in Appendix 5 of this consent, between 1 October to 30 November and 1 January and 14 February of each year, except with the approval of the Consent Authority who will have particular regard to the views of the Department of Conservation.

CONDITION 3- consent 2010.193, RMA s6(c)

If the migratory population of godwits are ~~feeding and~~ present in the immediate area of the Aramoana sand flats shown in Appendix 5 of this consent, during the period 1 February to 31 March of each year Major Capital Works in the vicinity of the Aramoana sand flats are to be undertaken only when the tidal height is above half-tide (>1.0 metre above Chart Datum), except with the approval of the Consent Authority in consultation with the Department of Conservation.

CONDITION 4- consent 2010.195, RMA s7aa

At minimum, the consent holder shall commission a suitably qualified person or organisation to undertake biological monitoring surveys of the foreshore, seabed and intertidal flats within the Lower Harbour and including the Port Chalmers swinging and berthing areas and the Approach Channel. If additional surveys are developed and contained within the Environmental Management Plan, this is to be in addition to the requirements of this consent. The surveys will be undertaken at the following time periods:

- a) At least three months prior to the commencement of any Incremental Capital works as a baseline survey;
- b) three yearly intervals during the Incremental Capital works;
- c) a maximum of 36 months after the completion of Incremental Capital works.
- d) at least three months prior to the commencement of Major Capital works;
- e) 12 monthly during Major Capital works;
- f) 12 monthly for a maximum of three 12 month periods after the completion of Major Capital works.

The results presented in a report submitted to the Consent Authority within 3 months of each survey being undertaken.

CONDITION 5- consent 2010.198, s6(c)

The consent holder will ensure that aggregations of feeding birds and marine mammals which might be present in the disposal ground are avoided at all times by ensuring that a competent observer is on board the dredge and that the Master takes advice to ensure avoidance.

CONDITION 6- consent 2010.198, s7aa

The consent holder shall include in the Environmental Management Plan prepared for Coastal Permit 2010.193 the following details for the works authorised by this consent. The deposition component of the Environmental Management Plan shall incorporate industry best practice and include but not be limited to the following:

- (a) a description of how the deposition occurs;
- (b) methods to be implemented to minimise the risks and effects on public safety and that of marine biota, in particular the method detailed in condition 8 of this consent;
- (c) methods to be implemented to manage the discharge and associated plumes of sediment laden water from the deposition;
- (d) a timetable of the frequency and dates of bathymetric surveys as required by this consent
- (e) details of the scope of any biological monitoring surveys;
- (f) results of the records kept in accordance with condition 12 of this consent.

Any changes to the Environmental Management Plan shall be made after consultation with the Consent Authority and shall be submitted to the Consent Authority prior to those changes being implemented.

CONDITION 7, consent 2010.198, RMA s7aa

The consent holder shall record the following information in relation to the disposal of material at site AO:

- a. the volume and nature (as defined by approximate portion of clay, silt and sand) of dredge material in each disposal event; and
- b. the GPS location of chart reference of the event; and
- c. the date and time of disposal; and
- d. a cumulative total of the volumes of disposal from the commencement of the consent.

The records shall be kept and submitted in report format to the consent authority on a five yearly basis (with the first being required to be submitted by 1 March 2016) and at any time upon request.

CONDITION 8, consents 2000.472_VI, 2010.193 - 2010.198 inclusive, RMA s6(c), 7(aa), 7(d), 7(f), 7(g)

Technical Group

- a. The consent holder will establish a technical group with the following brief:
 - i. to meet and receive monitoring data and reports from the physical and biological monitoring undertaken as part of Next Generation dredging, and present and future maintenance dredging;
 - ii. on an ongoing basis to evaluate the physical and biological impacts of the Next Generation project on the Lower Otago Harbour and the receiving waters offshore;
 - iii. to make recommendations to the Consent Holder and/or the Consent Authority on management actions to ameliorate the adverse effects of dredging and disposal as part of the Next Generation project;
 - iv. To make recommendations to the Consent Holder and/or the Consent Authority on appropriate changes to the physical and biological monitoring framework to ensure that it delivers timely focused results for the improved management of the project.
- b. Changes to the Environmental Management Plan in response to recommendations of the Technical Group shall be reasonably considered by POL and implemented to the extent practicable. Any changes to the Environmental Management Plan shall be submitted to the Consent Authority to ensure that it complies with the conditions of consent.
- c. The Technical group will have the following membership:
 - v. Representatives of Otakou and Puketeraki runanga;
 - vi. A representative of the Department of Conservation;
 - vii. A representative of Port Otago Limited.
 - viii. A representative of Otago Regional Council.

The committee may co-opt additional members to ensure that it has the requisite skills to be able deliver on its brief.

d. The technical committee will be serviced by the consent holder.

The reports described in 1a) above are those specified under the conditions of the following consents.

- f) 2000.472 VI, condition 12;
- g) 2010.193, conditions 19 and 23;
- h) 2010.194, conditions 11 and 14;
- i) 2010.195, conditions 13, 14, 15
- j) 2010.197, condition 5; and
- k) 2010.198, conditions 10, 11, 13, 14 and 15.

CONDITION 9, consent 2010.98, RMA s6(c), 7(aa), 7(d), 7(f), 7(g)

The Consent Holder shall commission a suitably qualified person or organisation to undertake a comprehensive baseline biological monitoring survey at least three months prior to commencement of Incremental Capital Works and Major Capital Works. The extent of the baseline survey will focus on the zone indicated in blue on drawing A1.11254 as specified in Appendix 2, but should also gather information about meaningful parameters at sites near Shag Point and Pipikaretu Point (as control sites). The details of this baseline monitoring will be included in the Environmental Management Plan which is to be developed in consultation with the Technical Group before being submitted to the Consent Authority. The baseline biological monitoring survey will be reported to the Consent Authority once completed.

CONDITION 10, consent 2010.98, RMA s6(c), 7(aa), 7(d), 7(f), 7(g)

Within 3 months of the completion of the baseline survey required by Condition 9, the consent holder shall commission an ongoing study by a suitably qualified person or organisation to monitor the effects on the biological and physical environment of dredge material deposited at A0. The aim of monitoring will be to provide a clear understanding of the degree and extent of impacts to a standard that will enable decisive and timely decisions about dredge disposal management. The extent of monitoring will cover the zone defined above in condition XXX (condition 9 above) and will expand if impacts are shown to extend beyond this area. Prior to the study commencing the Technical Group will be consulted on the design. The study shall include but not be limited to:

- (a) the effects on species diversity,
- (b) the long term effects on threatened species that frequent the area

- (c) an assessment of the effects on the number of each species,
- (d) setting out a comprehensive biological monitoring programme covering appropriate physical and biological parameters, including indicator species.
- (e) Measurement of turbidity, water clarity and sediment movement in order to further understand re-suspension and enable ground truthing of the sediment plume modelling.

Monitoring of indicators will be at a frequency appropriate for detecting change in the indicator and a monitoring plan shall be included in the Environmental Management Plan

CONDITION 11, consent 2010.98, RMA s6(c), 7(aa), 7(d), 7(f), 7(g)

The Technical Group will meet at least every 6 months or sooner if there is any aberration from expected variation in any of the monitored parameters Any exceedence of threshold levels as set in the EMP identified from the monitoring will be reported to the consent authority immediately and acted upon through the EMP. A report will be provided to the Consent Authority, at yearly intervals for the duration of the works outlining the results from monitoring the effects of Incremental Capital Works and Major Capital Works and allowing a review of the effectiveness of the monitoring.

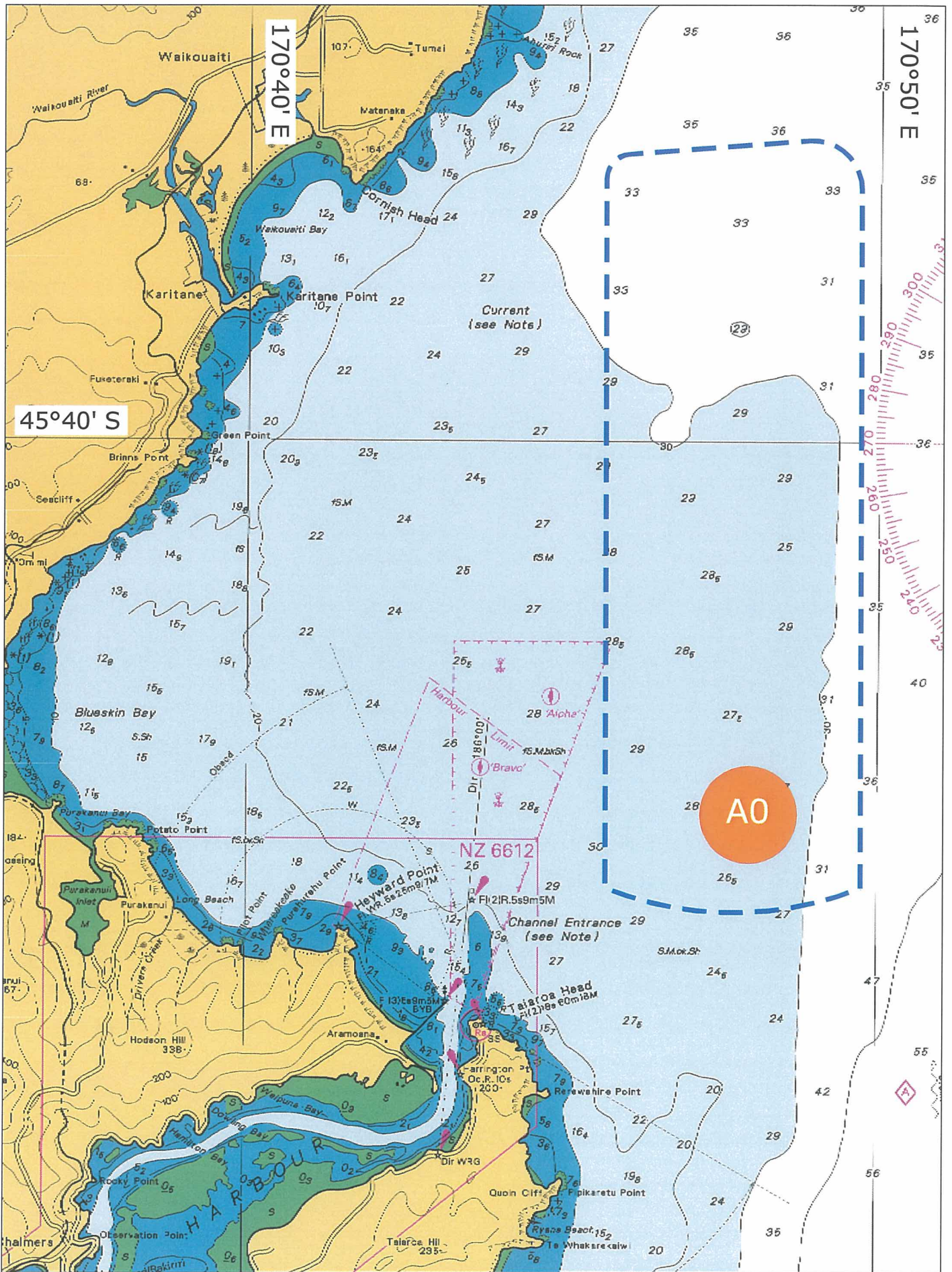
CONDITION 12, consent 2010.98, RMA s6(c), 7(aa), 7(d), 7(f), 7(g)

Monitoring will continue for three years following completion of either the Incremental Capital or Major Capital dredging operation (whichever is completed later).

CONDITION 13, consent 2010.98, RMA s6(c), 7(aa), 7(d), 7(f), 7(g)

Results from all monitoring undertaken pursuant to Conditions XXX (as per the conditions in appendix 1, being conditions 9, 10 and 12) shall be reported to the Consent Authority on an annual basis.

APPENDIX 2



Project Next Generation
 Offshore Biological Monitoring Zone

Dwg No. 11254
 Scale 1:100000

