June 2, 2025 PUP No. 869-0014-23-26

VIA EMAIL: Richard.Opala@MOWI.com

MOWI Canada West Inc.
1046 Cedar Street
Campbell River, BC
V9W 7E2

Dear Permittee:

Enclosed is Pesticide Use Permit No. 869-0014-23-26 issued under the provisions of the *Integrated Pest Management Act*. Your attention is respectfully directed to the terms and conditions outlined in the permit that must be complied with.

It is the responsibility of the permittee to ensure that all activities conducted under this permit are carried out with due regard to the rights of third parties and comply with other applicable legislation that may be in force - including, but not limited to, using pesticide only for the use described on the label and in accordance with the instructions on that label. This permit does not authorize entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the permittee.

This decision may be appealed to the Environmental Appeal Board in accordance with Section 14 of the *Integrated Pest Management Act*. An appeal must be delivered within 30 days from the date that notice of the decision is given. For further information, please contact the Environmental Appeal Board at (250) 387-3464.

Administration of this permit will be carried out by staff from the Environmental Protection Division's Regional Operations Branch. Plans, data and reports pertinent to the permit are to be submitted by email or electronic transfer to the administrator, or as further instructed.

Yours truly,

Ministry of Environment and Parks

Communities, IPM & AgriFood

Authorizations & Remediation Branch
Environmental Protection Division

Email: envcia@gov.bc.ca
Website: www.gov.bc.ca/env
Pesticides and Pest Management

Sajid A. Barlas, Ph.D, P.Ag
Section Head, IPM and AgriFood
On behalf of the Administrator, *Integrated Pest Management Act*

MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE STRATEGY

PESTICIDE USE PERMIT
No. 869-0014-23-26

Pursuant to Section 6 of the Integrated Pest Management Act

MOWI Canada West Inc.
1046 Cedar Street
Campbell River, BC
V9W 7E2

is authorized to use pesticides subject to the conditions listed below. Contravention of any of these conditions is a violation of the *Integrated Pest Management Act* and may result in prosecution.

1. Authorized Pesticide Use

1.1 The authorized pesticide is Interox Paramove 50, P.C.P. No. 31393, active ingredient: hydrogen peroxide.

1.2 The authorized pesticide application rate is 2.4 to 3.6 g/L.

1.3 The authorized method of pesticide application is immersion bath in a well-boat or in a tarpaulin.

1.4 A maximum of six pesticide applications per pen per year is permitted, of which a maximum of two applications may be conducted using the tarpaulin method.

1.5 Pesticide use must be for the purposes of managing post-chalimus stage sea lice (*Lepeophtheirus spp* and *Caligus spp)*, on farmed Atlantic salmon from the Bell Island, Doyle Island, Duncan Island, Marsh Bay, Raynor, Shelter Bay, Shelter Passage, Bull Harbour (Ghi ya), Robertson Island, and Heath Bay (Wanx talis) aquaculture facilities in marine areas near Port Hardy, as shown in Maps 1 - 11. This use is authorized as part of an integrated pest management program for sea lice management and an effective resistance management strategy for chemotherapeutant use at these sites.

2. Treatment dates

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2.1 The authorized pesticide use may occur from the issue date of this permit until the permit expires on June 1, 2028.

3. Access to Permit Information

3.1 Within seven days after the issue date of this permit, the permittee must:

(a) post a copy of the permit and the "Integrated Pest Management Plan – MOWI Canada West – July 2023" (or most current version) on the MOWI Canada West website;

(b) keep the copies of the permit and treatment plan posted until seven days following expiration of the permit

3.2 Within 3 business days of a request by anyone accessing the general area adjacent to a treatment area, the permittee must provide information detailing when and where individual pesticide treatments were, or will be, made.

4. Notification

4.1 At least 24 hours before any pesticide use, the permittee must post treatment notices at the access points to each facility being treated and maintain these notices for the duration of the pesticide use. These notices must:

(a) be at least 279 mm x 432 mm in size;

(b) be constructed of waterproof material;

(c) have the heading "Pesticide Use Notice" in 25 mm lettering;

(d) contain the permit number;

(e) contain the trade name and active ingredient of the pesticide to be used;

(f) contain the date, or range of dates, for the pesticide use;

(g) contain the precautions for all employees to take to minimize exposure to the pesticide and its residues;

(h) contain information on how to obtain additional information about the pesticide or the pesticide use.

4.2 Before any pesticide use, the permittee must ensure that all personnel involved are notified of the terms and conditions of the permit and any permit amendments.

4.3 At least 2 days and not more than 35 days before conducting a pesticide treatment,

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the permittee must send a treatment notice to IPMReporting@gov.bc.ca that includes the location, application method, date and estimated time of treatment.

4.4 The permittee must provide prompt notification to IPMReporting@gov.bc.ca when a pending pesticide treatment is cancelled, delayed or deferred.

4.5 The permittee must conduct any additional notification agreed upon during the consultation process in the manner agreed upon with the parties to be notified.

5. Integrated Pest Management Requirements

5.1 The permittee must make all reasonable efforts to remove moribund fish.

5.2 The permittee must follow the procedures outlined in the "Integrated Pest Management Plan – MOWI Canada West – July 2023" (or most current version) for correctly identifying sea lice and monitoring populations of *Lepeophtheirus spp* and *Caligus spp*. The permittee must ensure that the document is kept current throughout the duration of the permit.

5.3 The permittee must verify one of the following circumstances exist before conducting any pesticide treatment:

(a) A pre-established threshold of motile *Lepeophtherius* sea lice per fish per site has been exceeded. The pre-established threshold may be: required to maintain compliance with the company's Marine Finfish Aquaculture Licence under the *Fisheries Act;* established by the veterinarian responsible for fish stock health to achieve management objectives; or, established as part of an Area Based Management Plan.

(b) The veterinarian responsible for fish stock health deems that treatment of sea lice is necessary to prevent the infestation of a site when fish are being moved between pens.

5.4 When sea lice control is deemed necessary, the permittee must consider all available treatment methods as outlined in the "Integrated Pest Management Plan – MOWI Canada West – July 2023"' (or most current version) document.

5.5 After each pesticide application, the permittee must monitor sea lice populations in accordance with the "Integrated Pest Management Plan – MOWI Canada West – July 2023"' (or most current version) to determine the effectiveness of the pesticide application.

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5.6 The permittee must undertake ongoing research efforts to investigate the feasibility of additional sea lice control methods, including, but not limited to, the use of mechanical removal technology, cleaner fish, sea lice skirts, and freshwater treatments.

6. Monitoring

6.1 The permittee must visually monitor for any potential impacts to non-target organisms during the release of pesticide-treated waters from the well-boat or tarpaulin treatment method.

6.2 For tarpaulin treatments only, the permittee must conduct water sampling to determine levels of hydrogen peroxide in the water both inside and outside the treated pen, at various depths and times post-treatment, in accordance with the following guidelines:

(a) ***Number of samples required***
One water sample is required for each sample location, depth, and time.

(b) ***Depth of samples***
Within the pen, water samples for each sample location must be taken at 1m and 5m below the water surface.

Outside of the pen, water samples for each sample location must be taken at 1m, 5m and 20m below the water surface.

(c) ***Timing of sampling***
Both within and outside of the pen, water samples at each sample location and depth must be collected within 30 minutes post-treatment. If hydrogen peroxide is detected at any sample location or depth, sampling must be repeated at regular intervals of not more than 30 minutes until a “not detectable” result is obtained. Sampling at each location and depth may stop once a “not detectable” result is obtained.

(d) ***Location of samples***
Within the pen, the sample locations may be chosen by the permittee.

Outside of the pen, water samples must be taken at the outside edge of the pen and at 30m from the edge of the pen. The locations of sampling will align with the direction of the prevailing current. If hydrogen peroxide is detected at the location 30m from the pen, an additional sample location 45m beyond the 30m location must be added.

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7. Restrictions

7.1 The permittee must ensure pesticide-treated water from well-boats is released only while the vessel is in motion, and in locations that are a minimum of 200 m away from shore, **OR** the well-boat must employ a filtration system that is capable of filtering 100% of waste water through a minimum 150 micron filter prior to discharge.

7.2 For tarpaulin treatments, the permittee must employ a sea lice recapture device consisting of a collection trough, water pumps, and a screen to capture dislodged sea lice, and make reasonable attempts to recover dislodged sea lice during treatment.

7.3 Tarpaulin treatments may only be conducted if fish size limitations are exceeded, or if sea lice outbreaks exceed the treatment capability of well-boat assets.

7.4 Pesticide use must be conducted under the direction of a provincially-licensed veterinarian.

7.5 Pesticide use must be conducted by applicators with valid certificates in the M*arine Aquaculture* category, and in accordance with any additional treatment-specific training required by the pesticide manufacturer.

7.6 The permittee must ensure that a copy of the certificate of all certified applicators conducting the pesticide use is at or near the treatment location during the pesticide use.

7.7 The permittee must maintain and implement the "Integrated Pest Management Plan – MOWI Canada West – July 2023"' (or most current version). Should there be any discrepancy between the treatment plan and clauses in this permit, the permit shall prevail.

7.8 The permittee must comply with all applicable regulations under the *Integrated Pest Management Act*.

7.9 This permit is not transferable without the written approval of the Administrator.

7.10 Areas affected by pesticide spills that result in impacts not authorized by or consistent with this permit must immediately be evaluated and decontaminated as appropriate.

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8. Record Keeping and Reporting

8.1 For each treatment location and day of pesticide use, the permittee must keep a record containing the following information:

(a) the treatment location;

(b) the name and certificate number of each pesticide applicator certificate holder who used the pesticide;

(c) the date and time of the pesticide use;

(d) the pre- and post-treatment sea lice monitoring results;

(e) the specific threshold and/or justification for the pesticide use determined by the veterinarian responsible for fish stock health;

(f) the trade name of the pesticide used and its registration number under the federal *Pest Control Products Act;*

(g) the method and rate of application and the total quantity of pesticide used;

(h) the details of observed impacts on non-target organisms during the release of pesticide-treated waters;

(i) for well-boat treatments:

i) the water temperature and direction of the tide at the time of release of pesticide-treated waters from the well-boat;

ii) the direction and speed of the well-boat at the time of release of treated waters;

iii) the distance from shore of the well-boat at the time the treated water is released; and

(j) for tarpaulin treatments, the results of the water monitoring requirements specified in Condition 6.2.

8.2 All records required under this permit must be retained for a period of 3 years after pesticide use and must be provided to an IPM Officer upon request.

9. Reporting

9.1 The permittee must submit an annual report for each calendar year to IPMReporting@gov.bc.ca on or before January 31 of the following calendar year. The report must include the following information:

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(a) The total quantity of Interox Paramove 50 used in the calendar year at all aquaculture facilities;

(b) For each aquaculture facility treated with Interox Paramove 50:

i) the date or range of dates of treatment(s);

ii) for well-boat treatments, the total number of well-boat loads;

iii) for tarpaulin treatments, the total number of pens treated;

iv) the average load biomass in kilograms;

v) the pre-treatment sea lice levels;

vi) the post-treatment sea lice levels;

vii) the percent efficacy of the treatment;

viii) the total volume of water treated;

ix) the total quantity of Interox Paramove 50 used; and

x) for tarpaulin treatments, the results of the water monitoring requirements specified in Condition 6.2.

(c) A summary statement indicating what, if any, effects on non-target organisms were observed during Interox Paramove 50 treatments.

(d) A summary of the sea lice recapture efforts conducted, including an estimate of the percent of dislodged sea lice captured for each Interox Paramove 50 treatment.

(e) A summary of any non-chemical treatments for sea lice control conducted, including the type and number of each treatment type.

(f) A summary of the number of SLICE (active ingredient emamectin benzoate) treatments conducted at all aquaculture facilities, including the date ranges associated with these treatments and the volume of SLICE used for each treatment.

(g) A summary of the ongoing research efforts by the permittee to investigate the feasibility of additional non-chemical sea lice control methods, including, but not limited to, the use of mechanical removal technology, cleaner fish, sea lice skirts, and freshwater treatments.

9.2 The permittee must report any effects on non-target organisms observed as a result of the release of pesticide-treated waters from the pen or the well-boat as soon as practicable to the Administrator via IPMReporting@gov.bc.ca.

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9.3 Upon request from the Administrator, the permittee must provide water treatment calculations and dose rates associated with the planned or performed pesticide use.

9.4 Pesticide spills that result in impacts not authorized by or consistent with this permit must be immediately reported to the Provincial Emergency Program at 1-800-663-3456.

9.5 If a pesticide spill results in impacts not authorized by or consistent with this permit, as soon as practicable, the permit holder must submit a report on the spill and activities undertaken under Condition 7.10 to environmentalcompliance@gov.bc.ca.

9.6 Permit non-compliance that results in impacts not consistent with the intent of this permit must be reported to environmentalcompliance@gov.bc.ca within 48 hours of the infraction's discovery. Further action taken, to the satisfaction of the Administrator, may be required to evaluate the potential impact of the non-compliance on human health and/or the environment.

9.7 If the permittee believes that the permit holder or another person has contravened the *Integrated Pest Management Act* or Regulation in a manner involving the release of pesticide into the environment, the permit holder must give written notice to the Administrator at environmentalcompliance@gov.bc.ca as soon as practicable.

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Map 1. Overview map of all ten aquaculture facilities

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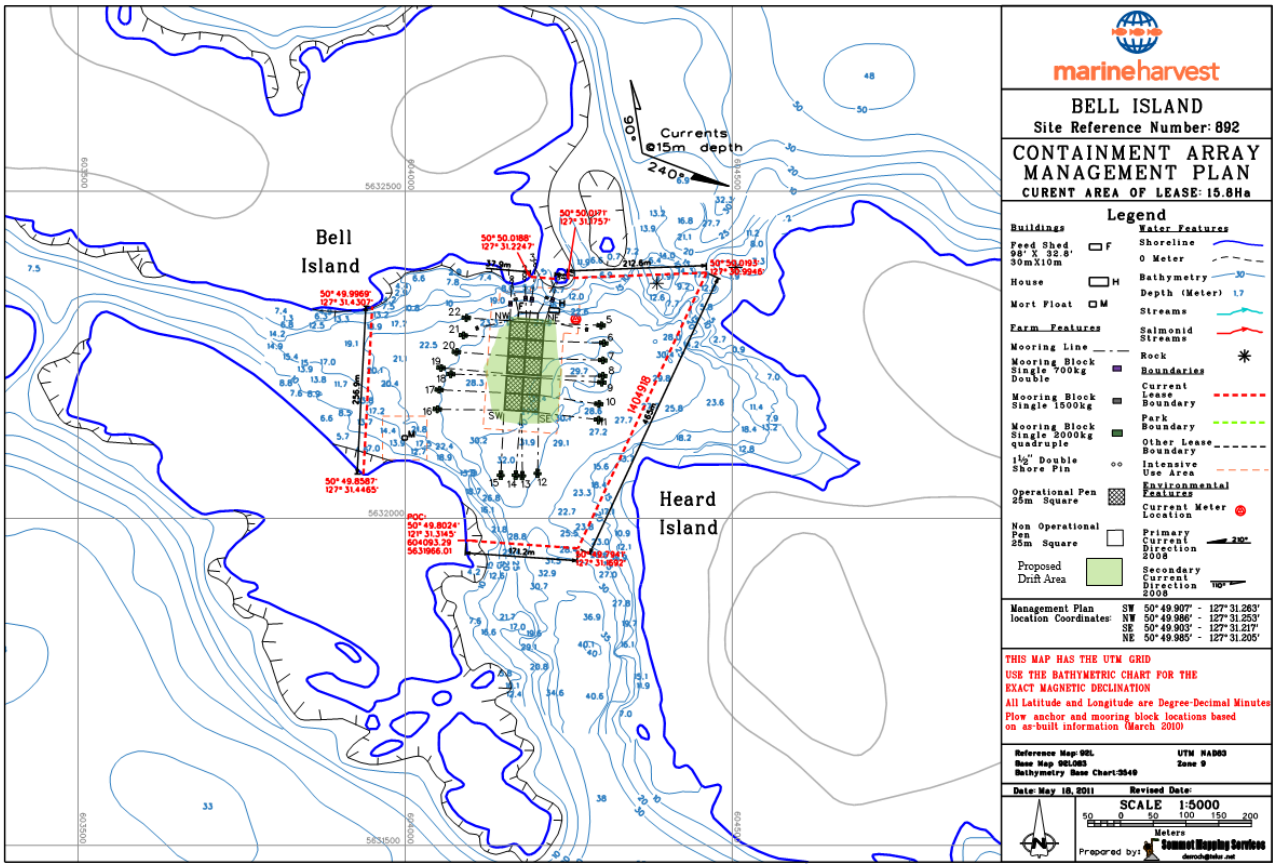

Map 2: Bell Island

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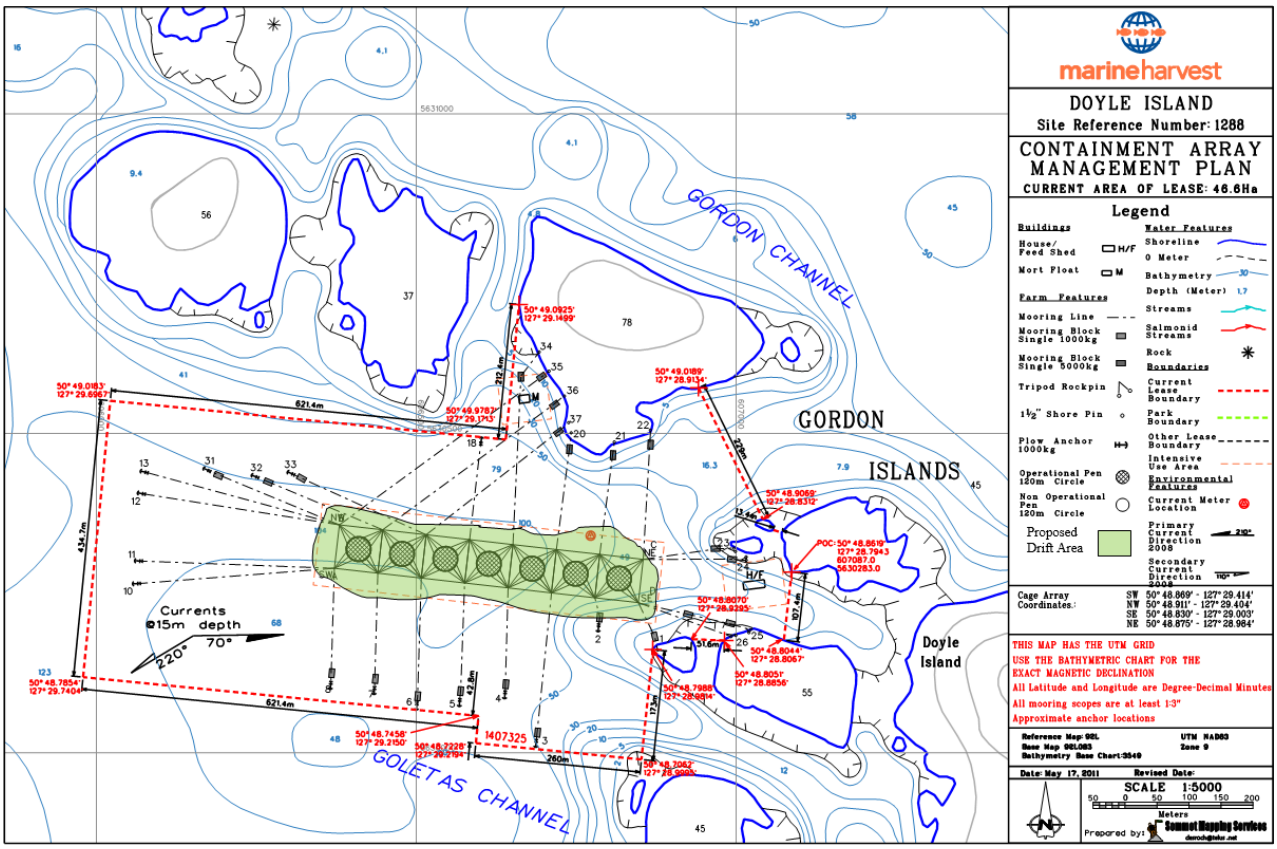

Map 3: Doyle Island

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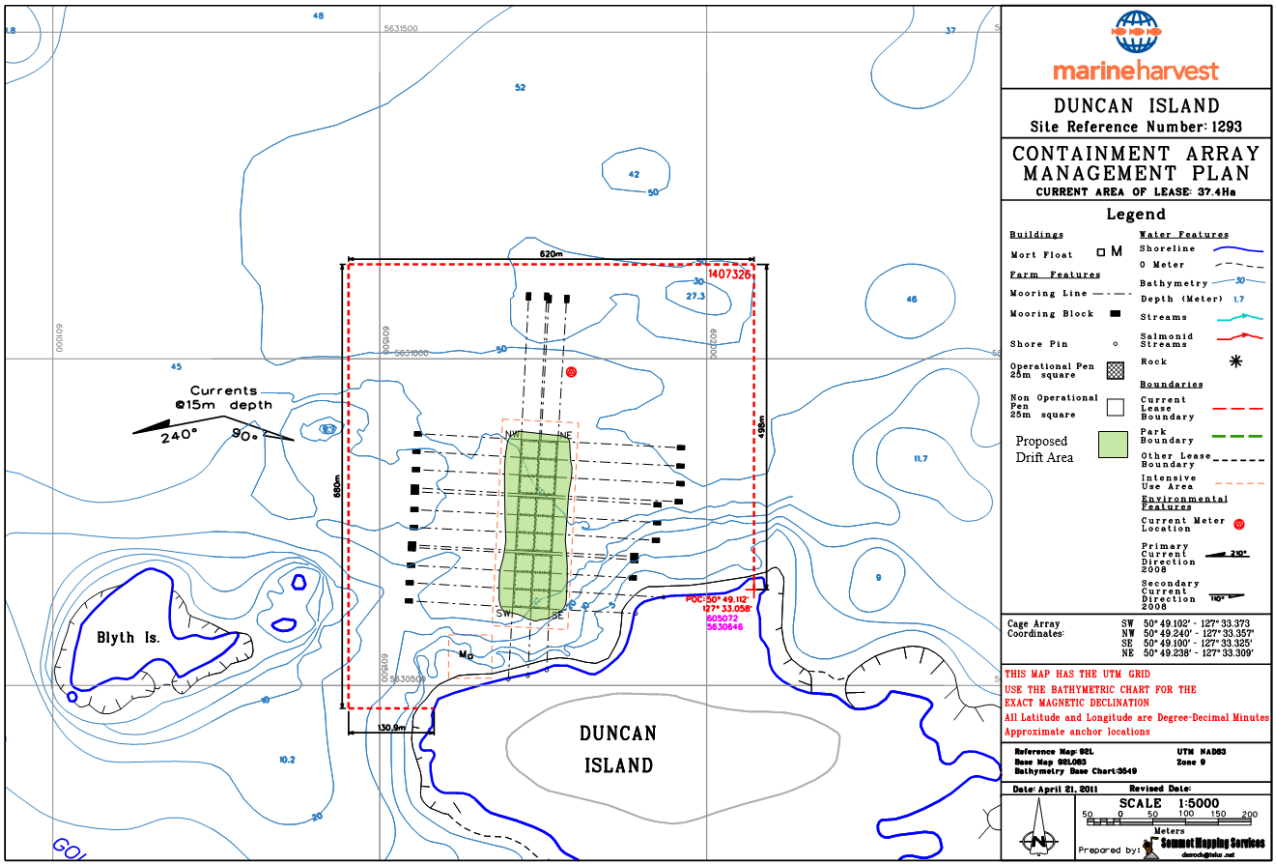

Map 4: Duncan Island

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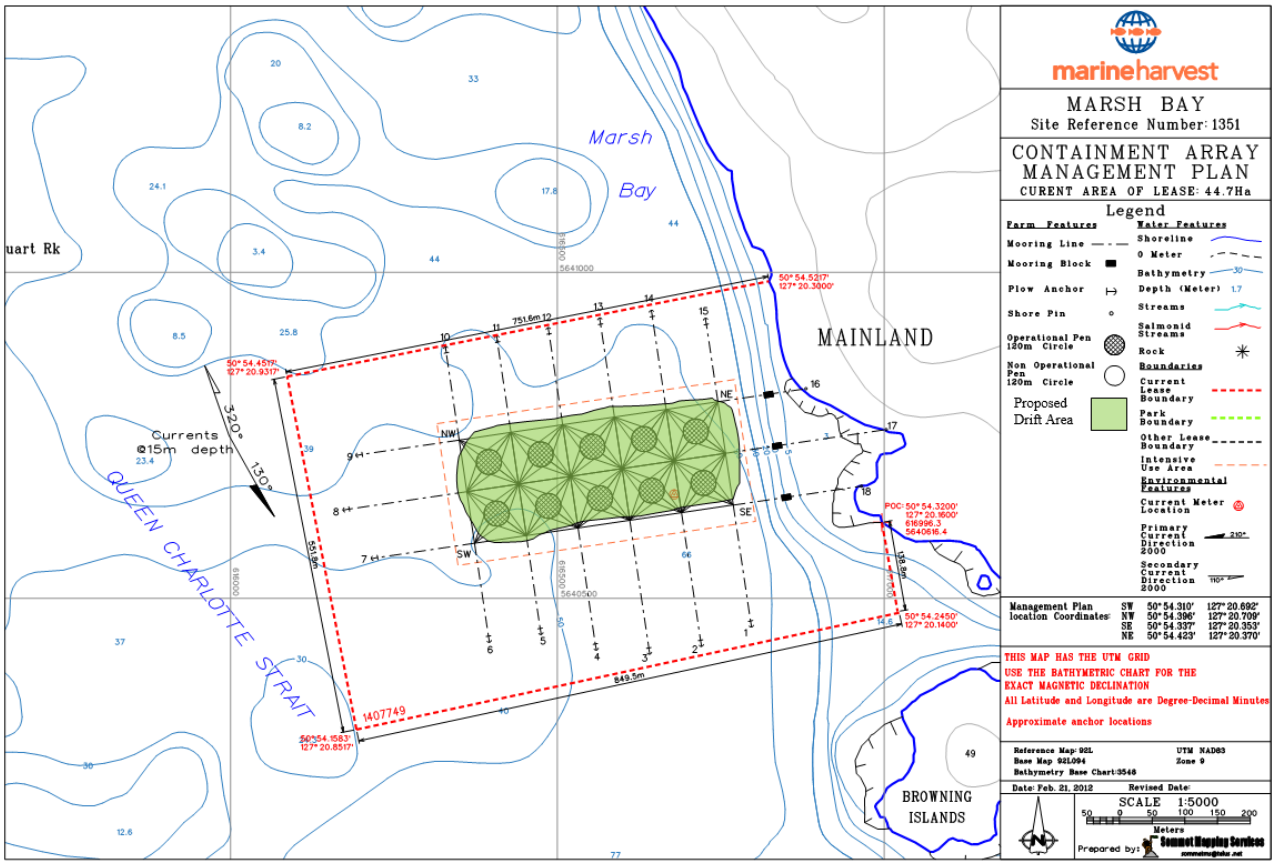

Map 5: Marsh Bay

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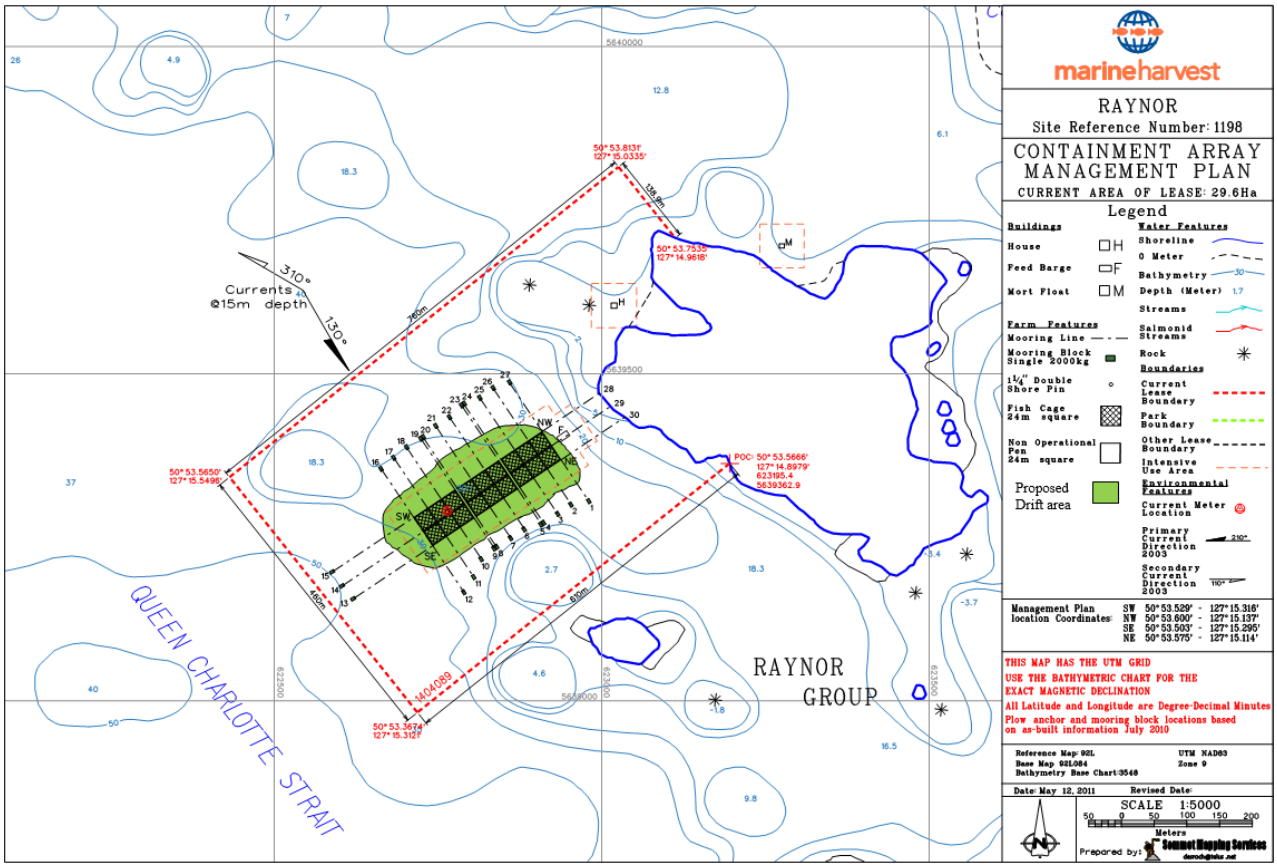

Map 6: Raynor

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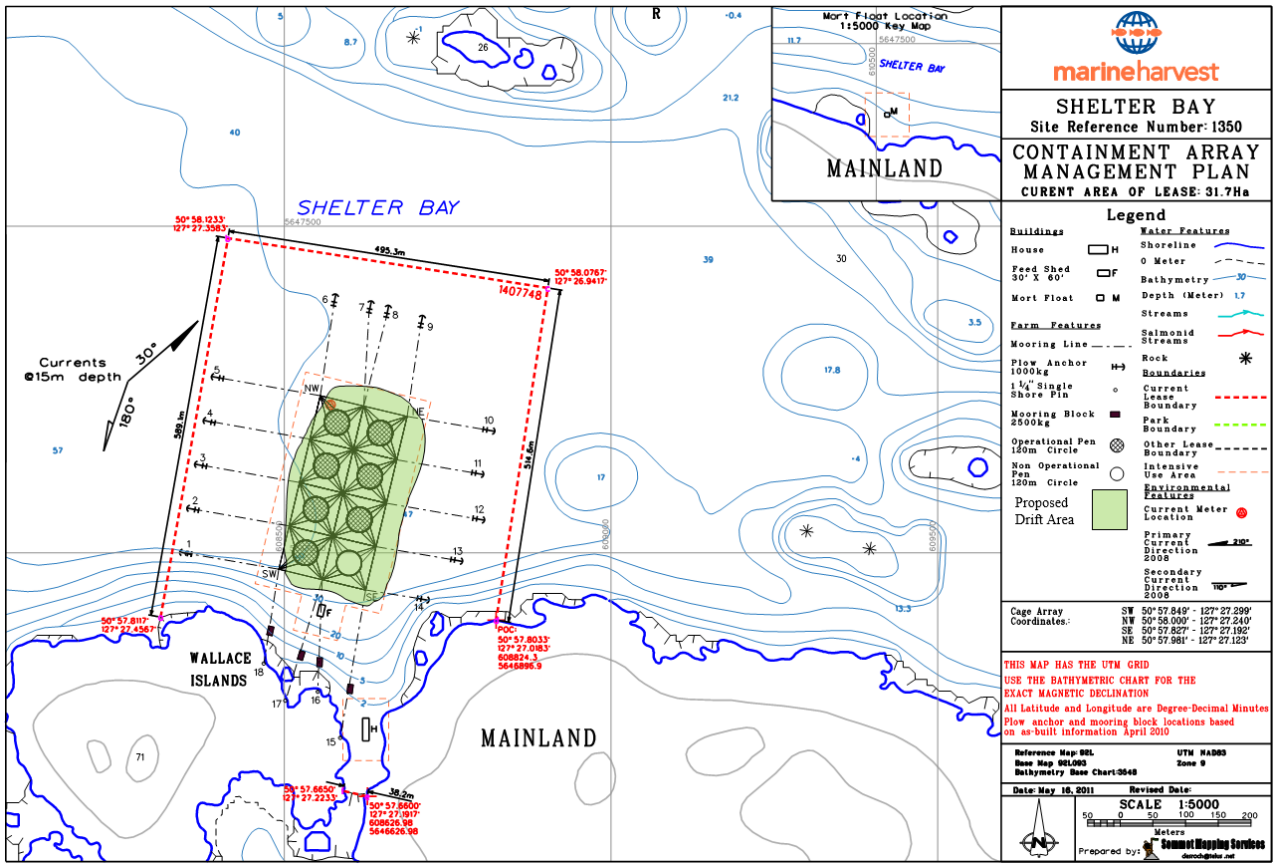

Map 7: Shelter Bay

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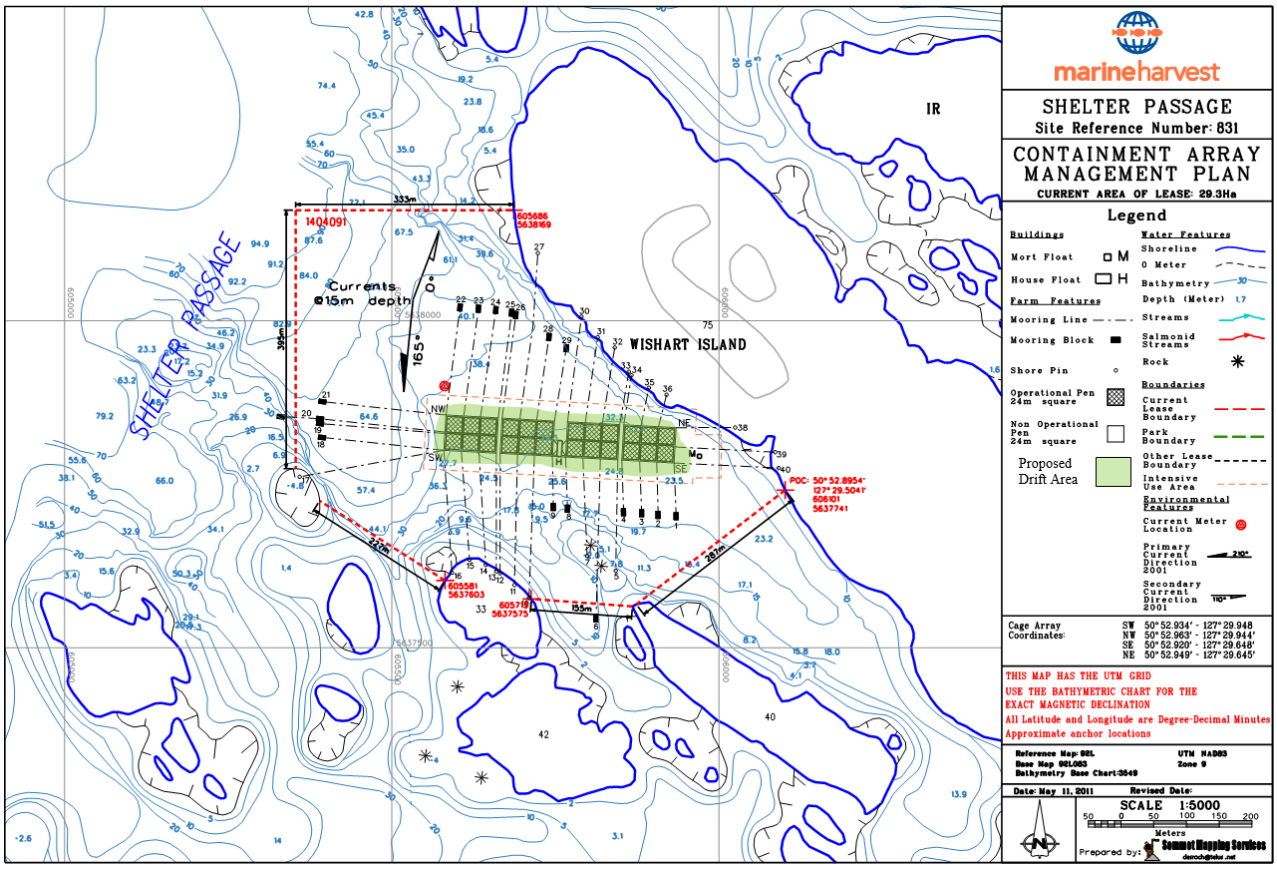

Map 8: Shelter Passage

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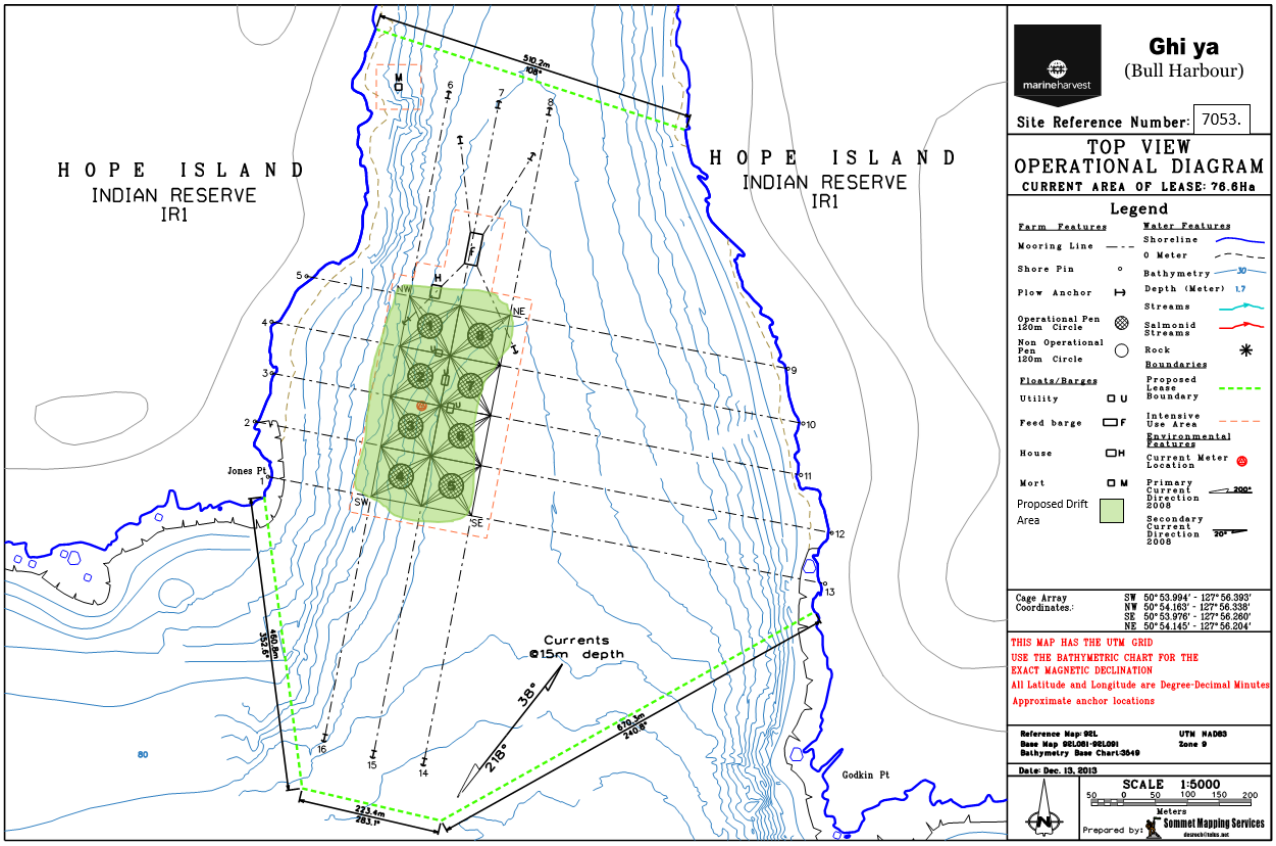

Map 9: Bull Harbour (Ghi ya)

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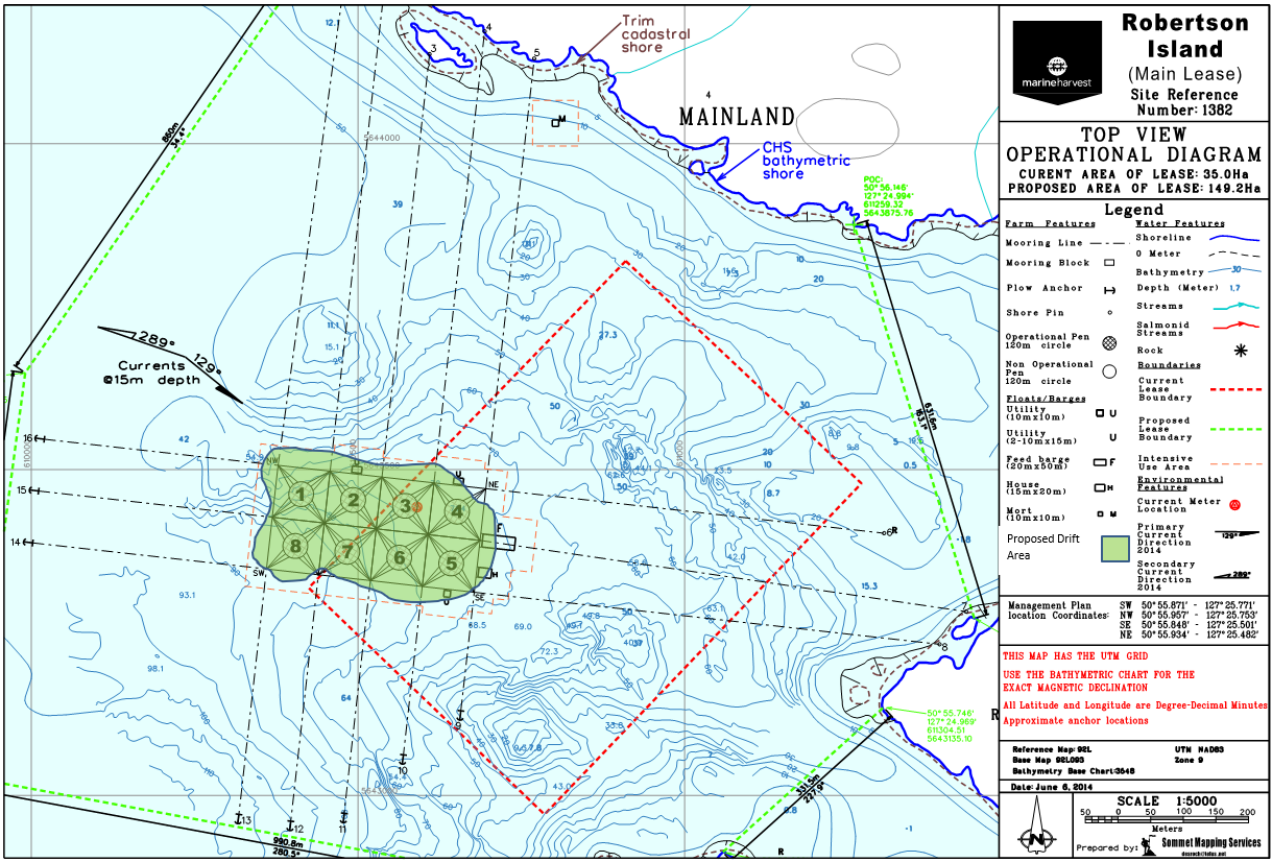

Map 10: Robertson Island

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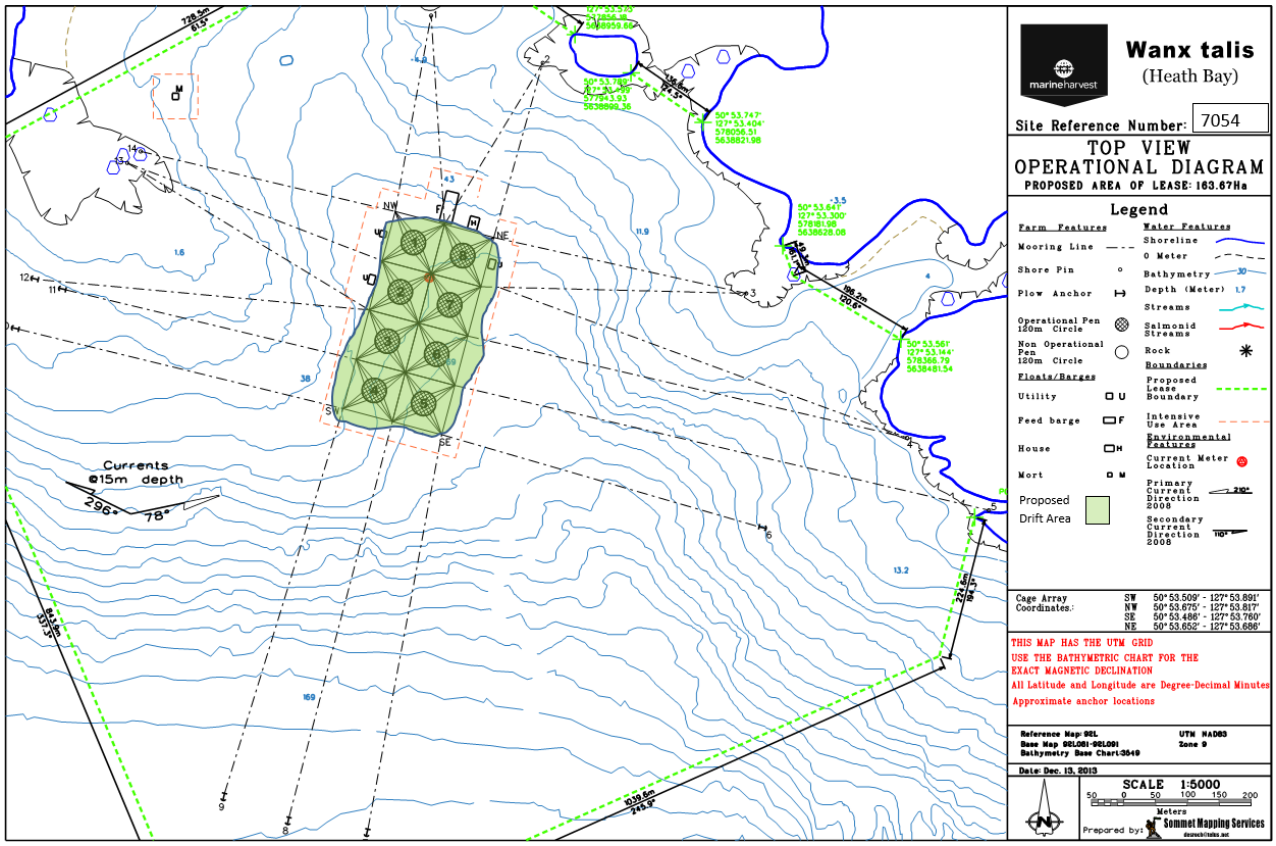

Map 11: Heath Bay (Wanx talis)

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