An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

23rd January 2020

Your Ref: **AP7/2020**

Our Ref: **T12/441B**

Mary O'Hara
Secretary to the Board
Aquaculture Licences Appeals Board
Kilminchy Court, Dublin Road
Portlaoise
Co. Laois

Dear Mary

I wish to acknowledge receipt of your letter on 10th January 2020 to Mr. Michael Creed T.D., Minister for Agriculture, Food and the Marine (and copied to Mr. John Quinlan) regarding the appeal against the decision to grant a new Aquaculture and Foreshore Licence in relation to the above file.

The following documentation refers:-

- Submission to Minister for Aquaculture Licence with draft licence(s) and reports received in relation to the application (**attached**).
- Notification of Minister's decision to the applicant, (**attached**).
- Map of sites in Ballyness Bay (**attached**)
- Publication Notice of the Minister's decision in the Donegal Democrat (**attached**).

Below is the hyperlink to the Department's website where the AA Report can be found:-

- the Appropriate Assessment for Ballyness Bay:- https://www.agriculture.gov.ie/media/migration/seafood/aquacultureforeshoremanagement/aquaculturelicensing/appropriateassessments/donegal/AppropAssessBallynessBayReport040319.pdf

If you require anything further please do not hesitate to contact me.

Yours sincerely

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Report supporting Appropriate Assessment of Aquaculture in Ballyness Bay SAC

(Site code: 01090)

Marine Institute

Rinville

Oranmore, Co. Galway

Version: February 2019

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1 PREFACE

In Ireland, the implementation of Article 6 of the Habitats Directive in relation to aquaculture and fishing projects and plans that occur within designated sites is achieved through sub-Article 6(3) of the Directive. Fisheries not coming under the scope of Article 6.3, i.e. those fisheries not subject to secondary licencing are subject to risk assessment. Identified risks to designated features can then be mitigated and deterioration of such features can be avoided as envisaged by sub-article 6.2.

The Habitats Directive is transposed in Ireland in the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011). Appropriate assessments (AA) of aquaculture are carried out against the Conservation Objectives, and more specifically on the version of the Conservation Objectives that are available at the time of the Assessment, for designated ecological features, within the site, as defined by the National Parks and Wildlife Service (NPWS). NPWS are the competent authority for the management of Natura 2000 sites in Ireland. Obviously, aquaculture and fishing operations existed in coastal areas prior to the designation of such areas under the Directives. Ireland is thereby assessing both existing and proposed aquaculture and fishing activities in such sites. This is an incremental process, as agreed with the EU Commission in 2009, and will eventually cover all fishing and aquaculture activities in all Natura 2000 sites.

In the case of aquaculture, DAFM receives applications to undertake such activity and submits a set of applications, at a defined point in time, for assessment. The FNPs and aquaculture applications are then subject to AA. If the AA or the RA process finds that the possibility of significant effects cannot be discounted or that there is a likelihood of negative consequence for designated features then such activities will need to be mitigated further if they are to continue. The assessments are not explicit on how this mitigation should be achieved but rather indicate whether mitigation is required or not and what results should be achieved.

2 EXECUTIVE SUMMARY

2.1 THE SAC

Ballyness Bay SAC (Site code: 001090) is a shallow estuarine complex, with extensive areas of sandflats which are exposed at low tide. It is located between Tramore Bay and Inishbofin Bay on the northwest coast of Co. Donegal.

The SAC is designated for the marine habitats Estuaries (1130) and Mudflats and sand flats not covered by seawater at low tide (1140) which support a variety of soft sedimentary communities and community complexes. The site is also designated for a variety of coastal sand dune habitats. Conservation Objectives for marine habitats and constituent communities (within Ballyness Bay SAC) were identified by NPWS (2014a) and relate primarily to the requirement to maintain habitat distribution, structure and function, as defined by characterising (dominant) species.

2.2 ACTIVITIES IN THE SAC

There are currently no licenced aquaculture operations in Ballyness Bay SAC. There are 20 applications for intertidal Pacific oyster production using the bag and trestle method and the culture of clams on the seabed intertidally. The profile of the aquaculture industry in the SAC, used in this assessment, was prepared by BIM and is derived from the list of licence applications received by DAFM and provided to the MI for assessment in August 2018.

2.3 THE APPROPRIATE ASSESSMENT PROCESS

The function of an appropriate assessment is to determine if the ongoing and proposed aquaculture activities are consistent with the Conservation Objectives for the Natura site or if such activities will lead to deterioration in the attributes of the habitats and species over time and in relation to the scale, frequency and intensity of the activities. NPWS (2014a) provide guidance on interpretation of the Conservation Objectives which are, in effect, management targets for habitats and species in the SAC. This guidance is scaled relative to the anticipated sensitivity of habitats and species to disturbance by the proposed activities. Some activities are deemed to be wholly inconsistent with long term maintenance of certain sensitive habitats while other habitats can tolerate a range of activities. For the practical purpose of management of sedimentary habitats, a 15% threshold of overlap between a disturbing activity and a habitat is given in the NPWS guidance (NPWS 2014b). Below this threshold disturbance is deemed to be non-significant. Disturbance is defined as that which leads to a change in the characterizing species of the habitat (which may also indicate change in structure and function). Such disturbance may be temporary or persistent in the sense that change in characterizing species may recover to pre-disturbed state or may persist and accumulate over time.

The appropriate assessment process is divided into a number of stages consisting of a preliminary risk identification, and subsequent assessment (allied with mitigation measures, if necessary) which are covered in this report. The first stage of the process is an initial screening wherein activities which are deemed not to have any impact on the conservation features, because they do not spatially overlap with a given habitat or have a clear pathway for interaction are excluded from further consideration. The next phase is the Natura Impact Statement (NIS) where interactions (or risk of) areidentified. Further to this, an assessment on the significance of the likely interactions between activities and

conservation features is conducted. Mitigation measures (if necessary) will be introduced in situations where the risk of significant disturbance is identified. In situations where there is no obvious mitigation to reduce the risk of significant impact, it is advised that caution should be applied in licencing decisions. Overall the Appropriate Assessment is both the process and the assessment undertaken by the competent authority to effectively validate this report and/or NIS. It is important to note that the screening process is considered conservative in that activities which may overlap with habitats but which may have very benign effects are retained for full assessment.

2.4 DATA SUPPORTS

Distribution of habitats and species population data are provided by NPWS[1]. Scientific reports on the potential effects of various activities on habitats and species have been compiled by the MI and provide the evidence base for the findings. The profile of aquaculture activities was provided by BIM. The data supporting the assessment of individual activities vary and provides for varying degrees of confidence in the findings.

2.5 FINDINGS

Aquaculture and Habitats/Species:

In the Ballyness Bay SAC there are 20 new applications for intertidal shellfish culture. The likely interaction between aquaculture activity and conservation features (habitats and species) of the site was considered.

An initial screening exercise resulted in a number of habitat features and species being excluded from further consideration. None of the aquaculture activities (existing and/or proposed) overlaps or likely interacts with the following features or species, and therefore the following habitats and species were excluded from further consideration in the assessment:

- Embryonic shifting dunes [2110]
- Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]
-
- Humid dune slacks [2190]
- *Vertigo geyeri* (Geyer's Whorl Snail) [1013].

Furthermore, all proposed aquaculture application sites do not overlap with the Annex I habitat Estuaries [1130] and this habitat was also excluded from further analysis (Table 2.1).

[1] NPWS Geodatabase Ver: September 2015 - http://www.npws.ie/mapsanddata/habitatspeciesdata/

Table 2-1 - Community types recorded in Ballyness Bay SAC and the Annex I habitats of (1130) Estuaries and (1140) Mudflats and sandflats not covered by seawater at low tide that overlap with overlap with proposed aquaculture activities

Feature	Community Type	Overlap with intertidal aquaculture activities
Estuaries (1130)	Coarse sediment to sandy mud with oligochaetes and polychaetes community complex	N/A
	Mobile sand community complex	N/A
Mudflats and sandflats not covered by seawater at low tide (1140)	Coarse sediment to sandy mud with oligochaetes and polychaetes community complex	✓
	Mobile sand community complex	✓
Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130)	**N/A**	✓

2.5.1 Habitats

An initial screening exercise resulted in the following habitat features and species being excluded from further consideration by virtue of the fact that no spatial overlap of the culture activities was expected to occur; Embryonic shifting dunes [2110], Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120], Humid dune slacks [2190] and *Vertigo geyeri* (Geyer's Whorl Snail) [1013]. Furthermore, none of the proposed aquaculture applications overlap with the Annex I habitat Estuaries [1130] and this was also excluded from further analysis.

A full assessment was carried out on the likely interactions between proposed culture operations and the feature Annex 1 habitat 1140 Mudflats and sandflats not covered by seawater at low tide. The likely effects of the aquaculture activities (species, structures, access routes) were considered in light of the sensitivity of constituent habitats and species of the Annex 1 habitat 1140. Annex I 1140 constituent communities considered include Coarse sediment to sandy mud with oligochaetes and polychaetes community complex and Mobile sand community complex.

Based upon the scale of spatial overlap of proposed intertidal oyster aquaculture activities (including access route activity) and the relatively high tolerance levels of the habitats and associated species, the general conclusion is that proposed intertidal culture activities are non-disturbing to the Qualifying Interests 1130 and 1140 and their constituent community types.

However, the overlap of access routes with the habitat - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] does appear to present a risk of erosion and habitat degradation.

2.5.2 Species

The likely interactions between the proposed aquaculture activities and the following Annex II Species were assessed; Grey seal *Halichoerus grypus* [1364] and Otter (*Lutra lutra* [1355]). The wider objectives for these species focus upon maintaining the good conservation status of populations. The main aspect of the culture activities that could potentially impact these species relates to disturbance by human movements and activities at the sites. Given the locations and timings of the proposed activities (i.e. daytime) it is concluded that activities would be non-disturbing to otter, but the risk posed to seal species cannot be entirely discounted.

2.5.3 Recommendations

Notwithstanding the conclusions noted above in relation to Annex 1 habitat 1140, it should be noted that the nature of the community type, Mobile sand community complex is such that there are likely to be locations where the sediments are extremely mobile (and soft) thus making them unsuitable for aquaculture operations. It is recommended, prior to making a decision to licence, that these areas be clearly identified with the Bay.

The report highlights risks to coastal habitat [2130] features if the activities proposed are licenced in full. More specifically, the risk arises from the additional traffic likely to occur on existing tracks as a result of the need to access the sites. It is recommended that that the views those with specific engineering expertise be sought in order to identify erosion prevention measures that might be put in place to mitigate the risks identified. Alternatively, the re-routing of access routes to avoid overlap with habitat feature 2130 might be considered?

In relation to interactions between aquaculture operations and seal use of the site, the risk of disturbance cannot be discounted. It is important to note that the site, to date, has had very little aquaculture operations and therefore, the seals will have little opportunity to habituate to the activities. Also of note, where there is no specific barrier to access (e.g. tidal channel), the seals are more likely to be disturbed. Based upon local observations it appears that the seals are faithful to this one identified haul out location. Therefore, careful consideration should be given to licencing the site which shares the sandbank with the observed seal haul out.

3 INTRODUCTION

This document assesses the potential ecological interactions of aquaculture activities within the Ballyness Bay SAC (Site code: 001090) on the Conservation Objectives of the site. The information upon which this assessment is based is a list of applications and extant licences for aquaculture activities administered by the Department of Agriculture Food and Marine (DAFM) and forwarded to the Marine Institute; as well as aquaculture and fishery profiling information provided on behalf of the operators by Bord Iascaigh Mara. The spatial extent of aquaculture licences is derived from a database managed by the DAFM[2].

4 CONSERVATION OBJECTIVES FOR BALLYNESS BAY SAC

The appropriate assessment of aquaculture and fisheries in relation to the Conservation Objectives for Ballyness Bay SAC is based on Version 1.0 of the objectives (NPWS 2014a – Version 1 14 May 2014) and supporting documentation (NPWS 2014b - Version 1 April 2014, NPWS 2014c - Version 1 March 2014). The spatial data for conservation features was provided by NPWS[3].

4.1 THE SAC EXTENT

Ballyness Bay is situated in north-west Donegal adjacent to the towns of Gortahork and Falcarragh. The underlying geology is mostly pelites, with some smaller areas of limestone and quartzite. This is mostly covered by windblown sand and peat. Ballyness Bay is a large and very shallow estuarine complex, with extensive areas of sandflats which are exposed at low tide. The full extent of the SAC is shown in **Figure 4.1** below.

4.2 QUALIFYING INTERESTS (SAC)

The SAC is designated for the following habitats and species (NPWS 2014a), as listed in Annex I and Annex II of the Habitats Directive:

- Estuaries [1130]
- Mudflats and sandflats not covered by seawater at low tide [1140]
- Embryonic shifting dunes [2110]
- Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]
- Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
- Humid dune slacks [2190]
- *Vertigo geyeri* (Geyer's Whorl Snail) [1013]

[2] DAFM Aquaculture Database version Aquaculture: May, 2015
[3] NPWS Geodatabase Ver: June 2015 - http://www.npws.ie/mapsanddata/habitatspeciesdata/

The spatial extent of the Annex 1 Qualifying Interests Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130], Estuaries (1130) and Mudflats and sandflats not covered by seawater at low tide (1140) are illustrated in **Figure 4.2, Figure 4.3 and Figure 4.4,** respectively (from NPWS 2014b).

Constituent communities and community complexes recorded within the Annex 1 marine habitats of (1130) Estuaries and (1140) Mudflats and sandflats not covered by seawater at low tide are listed in NPWS (2014b), presented in **Table 4.1** below and illustrated in **Figure 4.5**.

Table 4-1 - The community types recorded in Ballyness Bay SAC and the Annex I marine habitats in which they occur (NPWS 2014b).

Community Type	Annex I Habitats	
	Estuaries (1130)	Mudflats and sandflats not covered by seawater at low tide (1140)
Coarse sediment to sandy mud with oligochaetes and polychaetes community complex	✓	✓
Mobile sand community complex	✓	✓

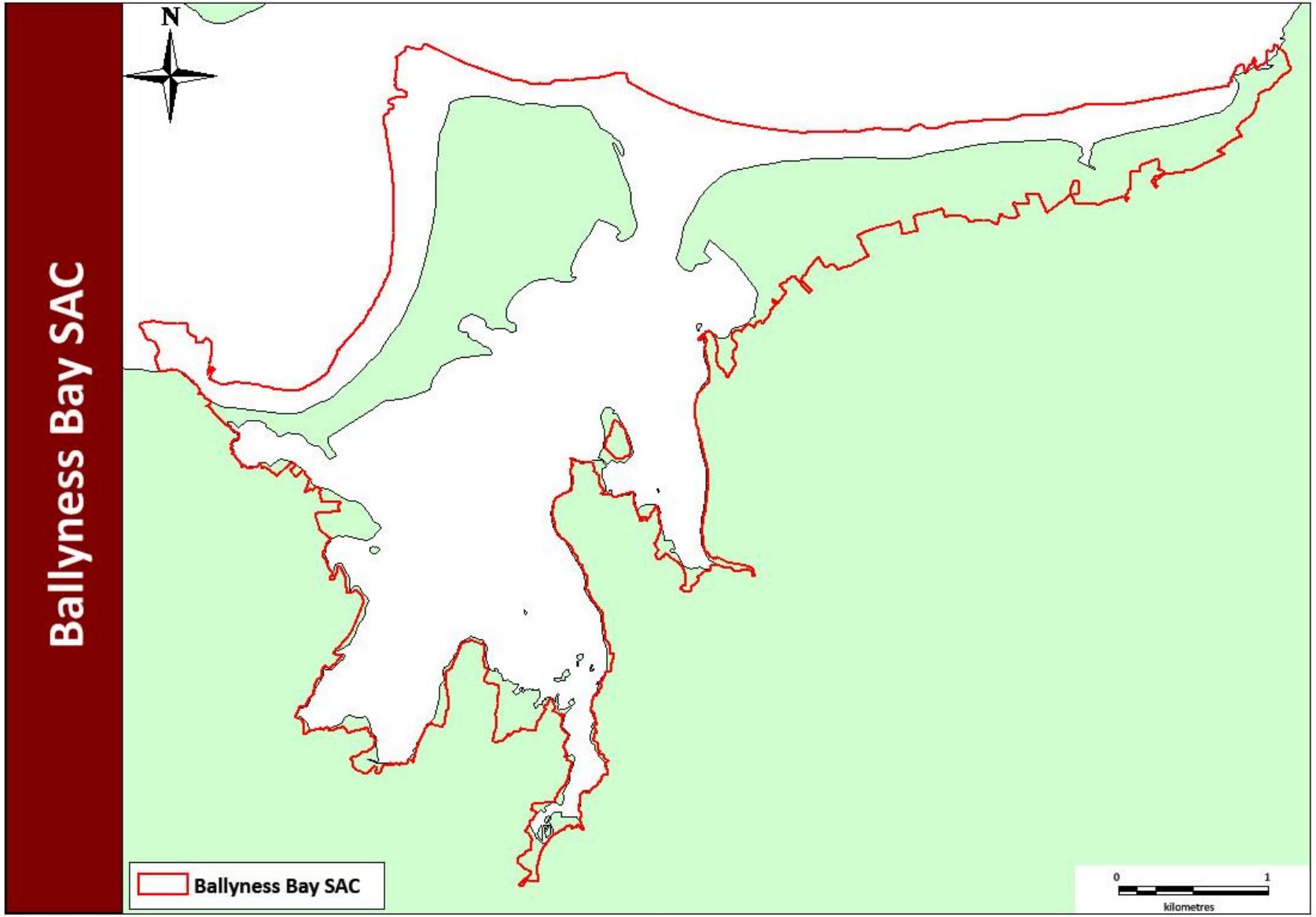

Figure 4-1- The extent of the Ballyness Bay SAC (NPWS 2014b).

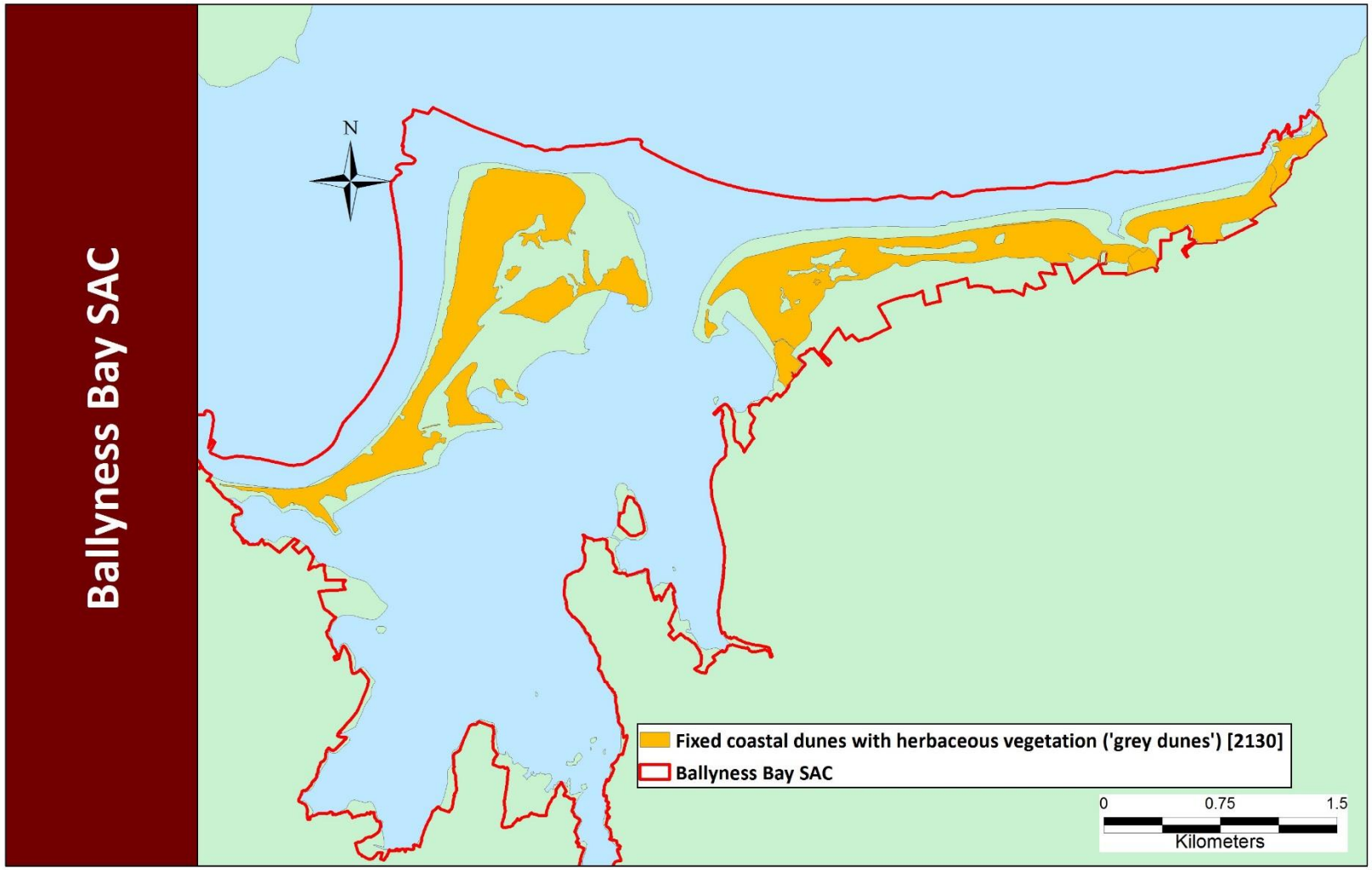

Figure 4-2: The extent of the coastal Annex I Qualifying Interest of (2130) Fixed coastal dunes with herbaceous vegetation (grey dunes) within the Ballyness Bay SAC (NPWS 2014b).

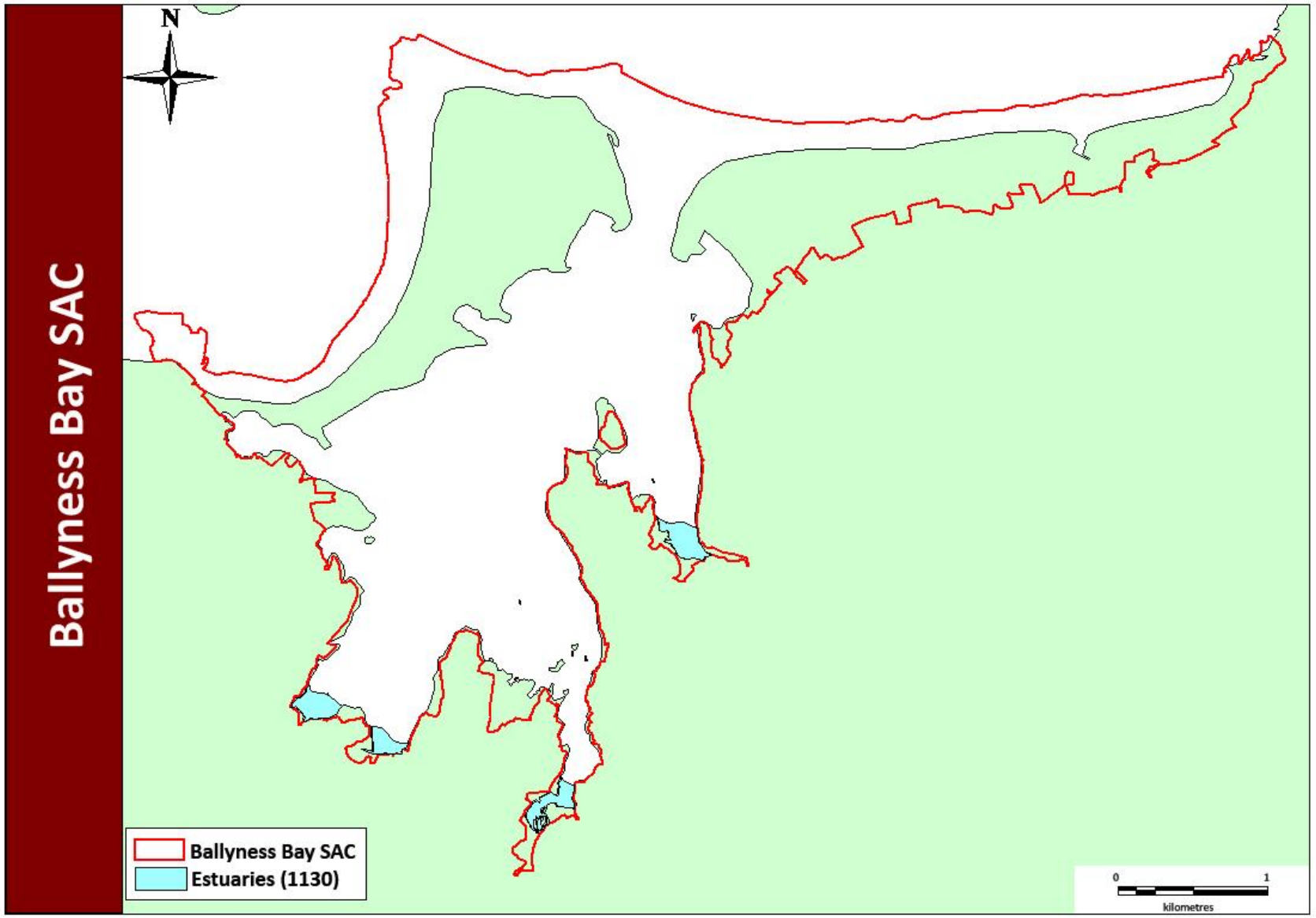

Figure 4-3 - The extent of the marine Annex I Qualifying Interest of (1130) Estuaries within the Ballyness Bay SAC (NPWS 2014b).

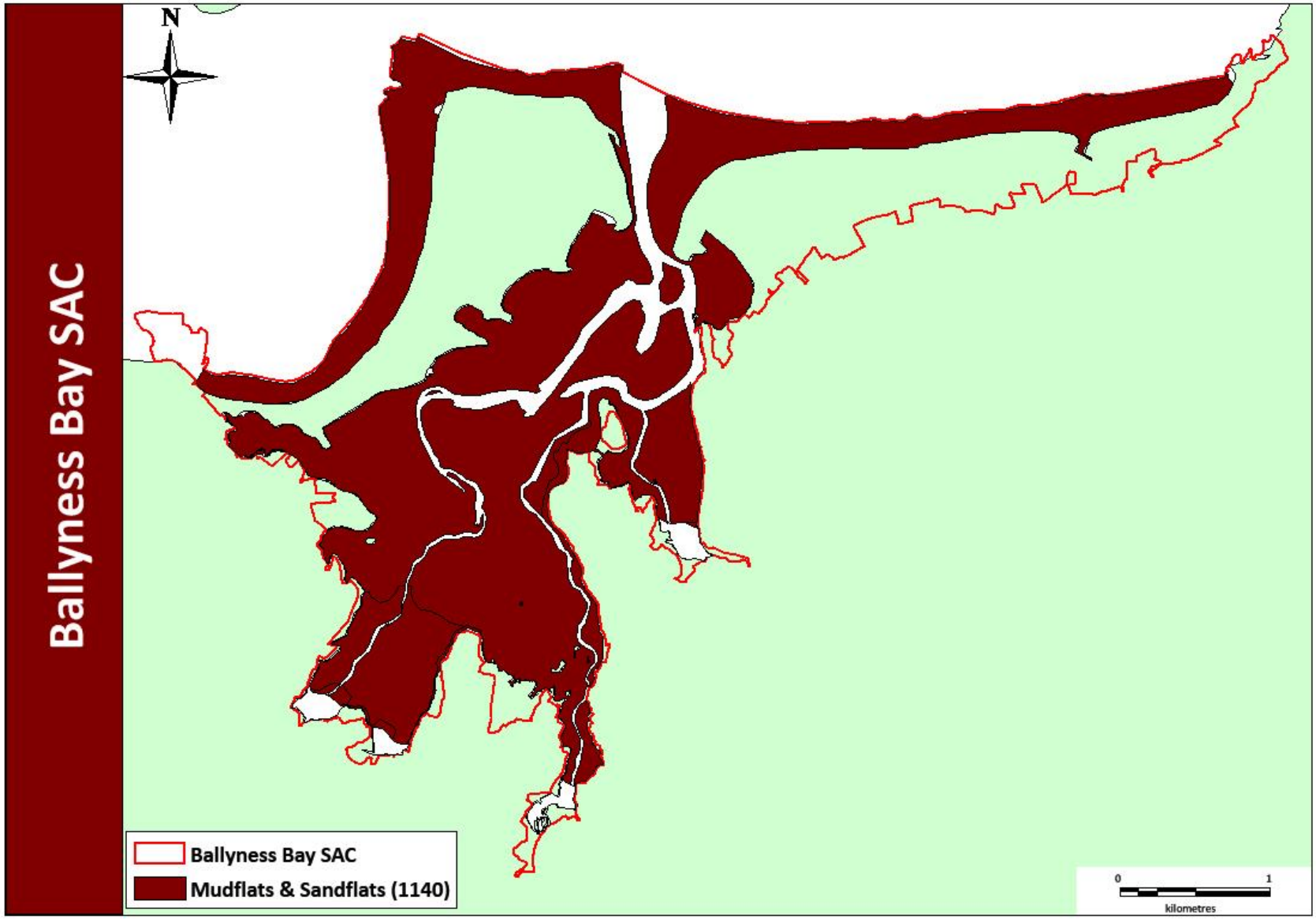

Figure 4-4 - The extent of the marine Annex I Qualifying Interest of (1140) Mudflats and sandflats not covered by seawater at low tide within the Ballyness Bay SAC (NPWS 2014b).

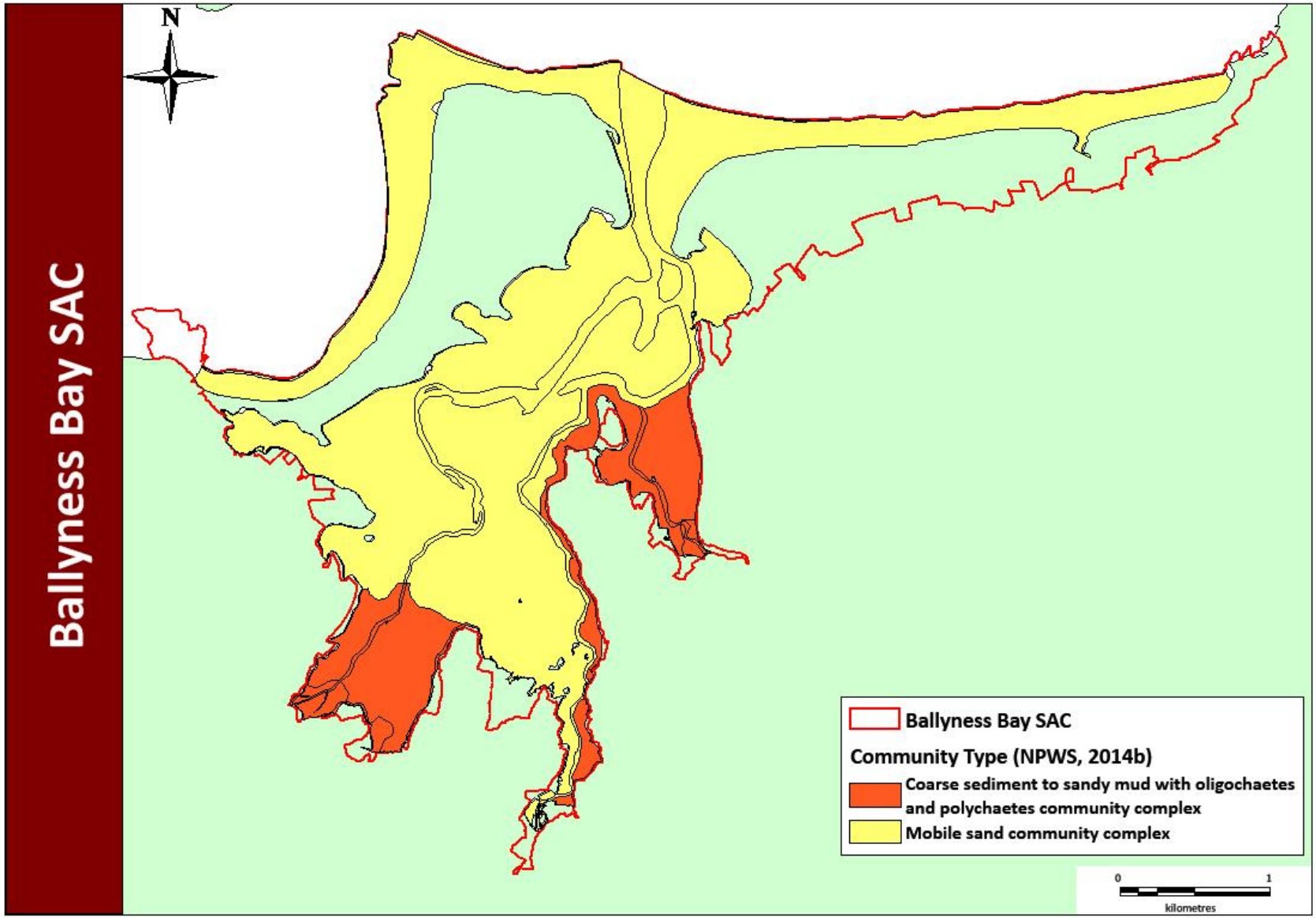

Figure 4-5 - Principal benthic communities recorded within the marine Annex I Qualifying Interests of (1130) Estuaries and (1140) Mudflats and sandflats not covered by seawater at low tide within the Ballyness Bay SAC (NPWS 2014b).

4.3 CONSERVATION OBJECTIVES FOR BALLYNESS BAY SAC

The Conservation Objectives for the Qualifying Interests for the SAC were prepared by NPWS (NPWS 2014a). The natural condition of the designated features should be preserved with respect to their area, distribution, and extent and community distribution. Habitat availability should be maintained for designated species and human disturbance should not adversely affect such species. The features, objectives and targets of each of the Qualifying Interests within the SAC are listed in **Table 4.2** below.

Table 4-2- Conservation Objectives and targets for marine habitats in Ballyness Bay SAC (NPWS 2014a, 2014b). Annex I features listed in **bold**.

Feature (Community Type)	Objective	Target(s)
Estuaries (1130)	Maintain favourable conservation condition	15.96ha: Targets are identified that focus on a wide range of attributes with the ultimate goal of maintaining function and diversity of favourable species and managing levels of negative species
(Coarse sediment to sandy mud with oligochaetes and polychaetes community complex)	Maintain favourable conservation condition	12ha; Likely area derived from Intertidal Surveys undertaken in 2006 and 2011. Along with a subtidal survey undertaken in 2011.
(Mobile sand community complex)	Maintain favourable conservation condition	3ha; Likely area derived from Intertidal Surveys undertaken in 2006 and 2011. Along with a subtidal survey undertaken in 2011.
Mudflats and sandflats not covered by seawater at low tide (1140)	Maintain favourable conservation condition	691.81ha: Targets are identified that focus on a wide range of attributes with the ultimate goal of maintaining function and diversity of favourable species and managing levels of negative species
(Coarse sediment to sandy mud with oligochaetes and polychaetes community complex)	Maintain favourable conservation condition	120ha; Likely area derived from Intertidal Surveys undertaken in 2006 and 2011. Along with a subtidal survey undertaken in 2011.
(Mobile sand community complex)	Maintain favourable conservation condition	570ha; Likely area derived from Intertidal Surveys undertaken in 2006 and 2011. Along with a subtidal survey undertaken in 2011.
Embryonic shifting dunes (2110)	Maintain favourable conservation condition	7.07ha; Targets are identified that focus on a wide range of attributes with the ultimate goal of maintaining function and diversity of favourable species and

Feature (Community Type)	Objective	Target(s)
		managing levels of negative species
Shifting dunes along the shoreline with Ammophila arenaria (white dunes) (2120)	Maintain favourable conservation condition	23.13ha; Targets are identified that focus on a wide range of attributes with the ultimate goal of maintaining function and diversity of favourable species and managing levels of negative species
Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130)	Restore favourable conservation condition	187.99ha; Targets are identified that focus on a wide range of attributes with the ultimate goal of maintaining function and diversity of favourable species and managing levels of negative species
Humid dune slacks (2190)	Maintain favourable conservation condition	13.87ha; Targets are identified that focus on a wide range of attributes with the ultimate goal of maintaining function and diversity of favourable species and managing levels of negative species
***Vertigo geyeri* (Geyer's Whorl Snail) (1013)**	Maintain favourable conservation condition	Targets include: No decline in numbers. There is one known site for this species in this SAC, Adult or sub-adult snails are present in at least two of the four samples taken from optimal or suboptimal habitat on the transect, At least two samples on the transect should have more than 20 individuals, 17m of habitat along the first 45m of the transect is classed as optimal and at least 34m is classed as optimal or sub-optimal habitat, Soils, at time of sampling, are saturated (optimal wetness) for at least 24m of the first 45m of the transect and 0.4-0.5ha of the site optimal and sub-optimal habitat mosaic.

4.4 SCREENING OF ADJACENT NATURA SITES FOR EX-SITU EFFECTS

In addition to the Ballyness Bay SAC there are four other SAC sites proximate to the proposed activities (**Figure 4.6**) including Horn Head and Rinclevan SAC (000147), Gweedore Bay and Islands SAC (001141) and the Tory Island Coast SAC (002259). In addition, there are 7 SPA sites in the vicinity of Ballyness Bay SAC (**Figure 4.7**). The characteristic features of all of these sites are identified in **Table 4.3** where a preliminary screening is carried out on the likely interaction with aquaculture activities based primarily upon the likelihood of spatial overlap.

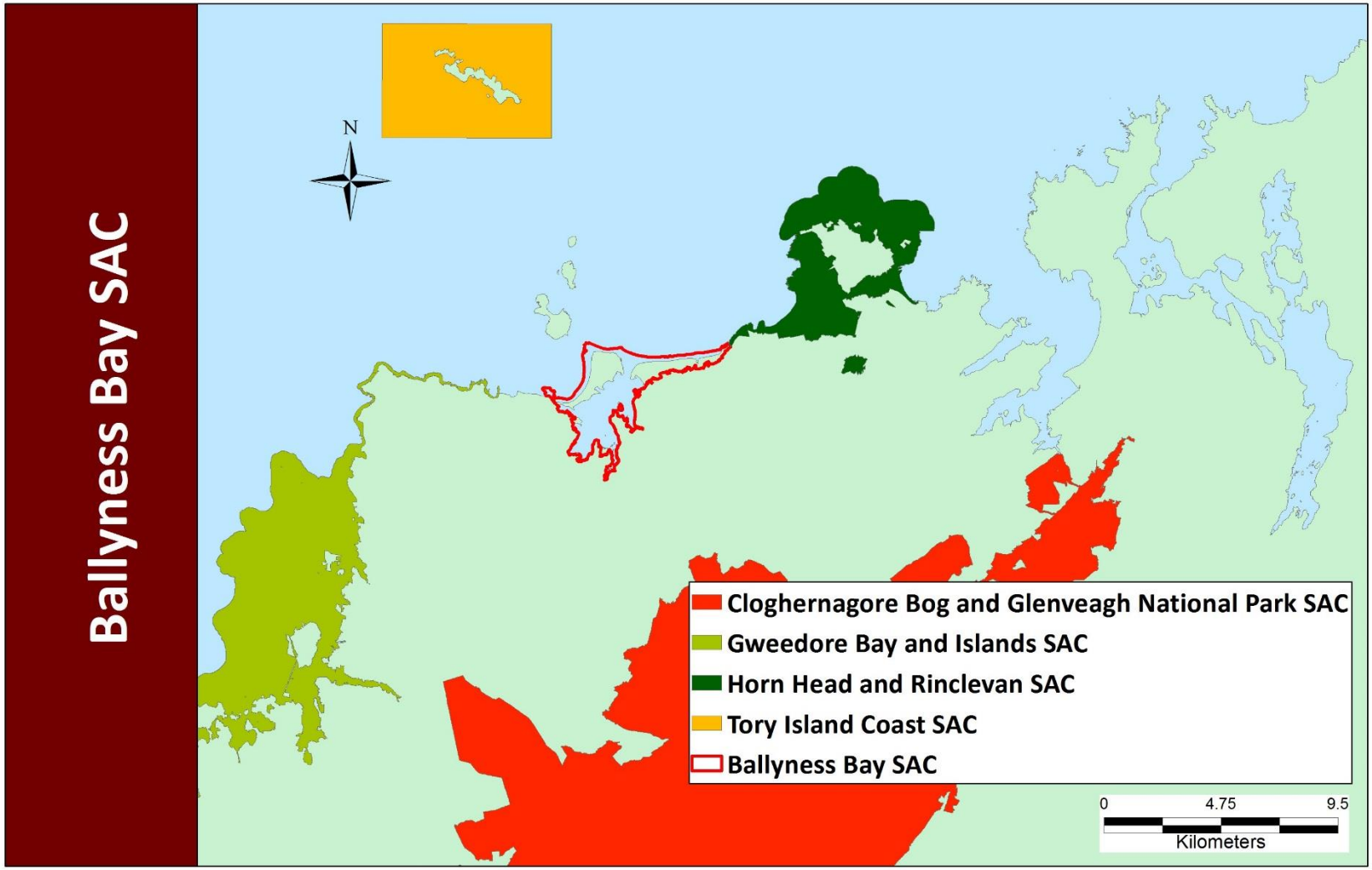

Figure 4-6 – SACs adjacent to the Ballyness Bay SAC (001090)

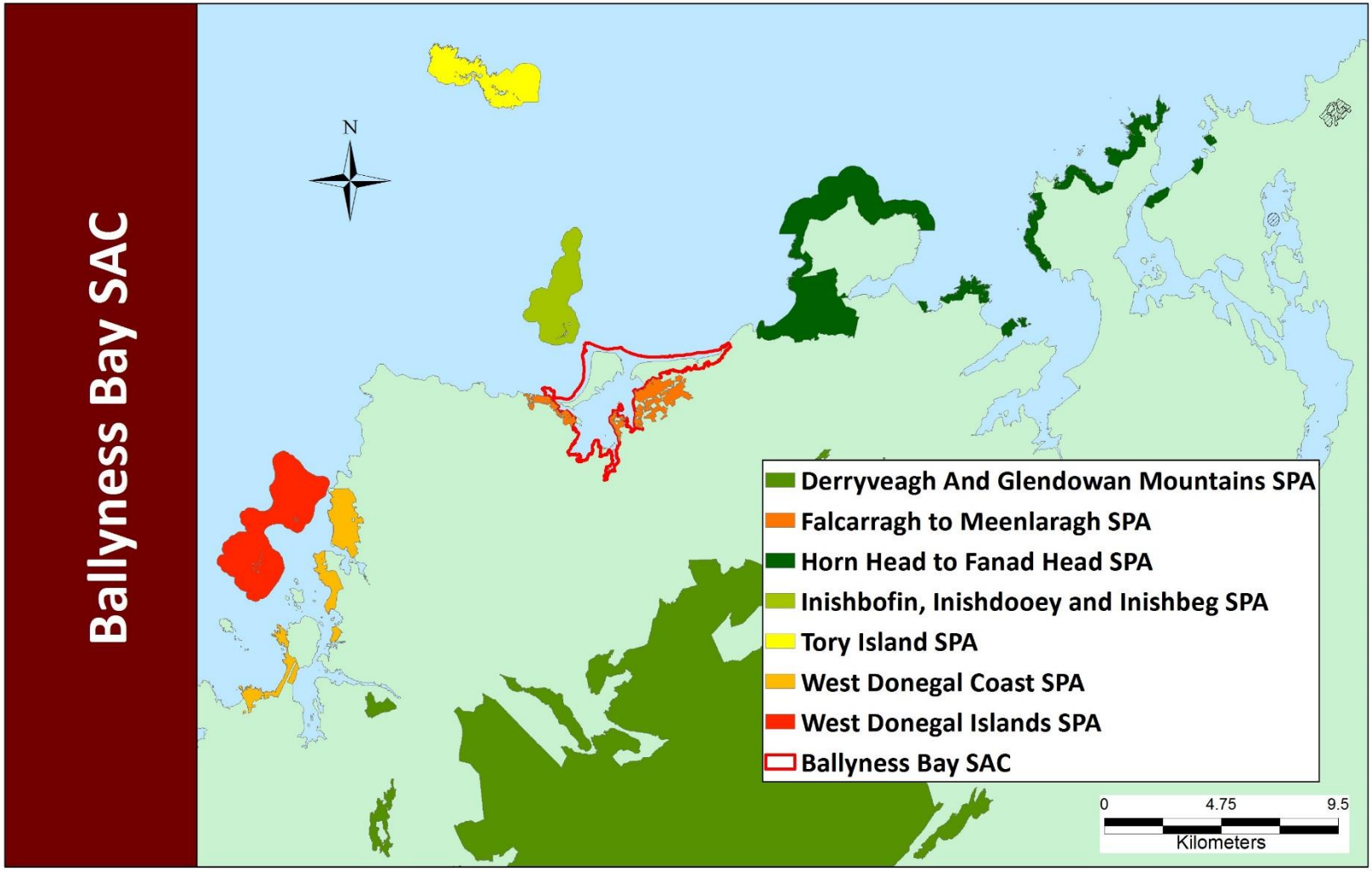

Figure 4-7 – SPAs adjacent to Ballyness Bay SAC (001090)

Table 4-3 - Natura sites adjacent to (in the vicinity of) the Ballyness Bay SAC and Qualifying Features with initial screening assessment on likely interactions with aquaculture activities.

Natura site (Site code)	Qualifying features (habitat/species code)	Aquaculture initial screening
Horn Head and Rinclevan SAC (IE000147)	Embryonic shifting dunes [2110]	No spatial overlap or likely interaction with aquaculture activities within the Ballyness Bay SAC – excluded from further analysis.
	Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]	
	Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	
	Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*) [2170]	
	Humid dune slacks [2190]	
	Machairs (* in Ireland) [21A0]	
	Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea* [3130]	
	Vertigo geyeri (Geyer's Whorl Snail) [1013]	
	Halichoerus grypus (Grey Seal) [1364]	**Horn Head and Rinclevan is adjacent to the Ballyness Bay SAC. Grey seal may migrate into the Ballyness Bay SAC and could interact with aquaculture activities – carry forward to Section 8.5.**
	Petalophyllum ralfsii (Petalwort) [1395]	No spatial overlap or likely interaction with aquaculture activities within the Ballyness Bay SAC – excluded from further analysis.
	Najas flexilis (Slender Naiad) [1833]	
Gweedore Bay & Islands SAC (001141)	Coastal Lagoons (1150)*	No spatial overlap or likely interaction with aquaculture activities within the Ballyness Bay SAC – excluded from further analysis.
	Reefs (1170)	
	Perennial vegetation of stony banks [1220]	
	Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]	
	Mediterranean salt meadows (*Juncetalia maritimi*) [1410]	
	Embryonic shifting dunes [2110]	

Natura site (Site code)	Qualifying features (habitat/species code)	Aquaculture initial screening
	Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]	No spatial overlap or likely interaction with aquaculture activities within the Ballyness Bay SAC – excluded from further analysis.
	Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	
	Decalcified fixed dunes with *Empetrum nigrum [2140]*	
	Atlantic decalcified fixed dunes (*Calluno-Ulicetea*) [2150]	
	Dunes with *Salix repens* ssp. *argentea* (*Salicion arenariae*) [2170]	
	Humid dune slacks [2190]	
	Machairs (* in Ireland) [21A0]	
	Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Nanojuncetea* [3130]	
	European dry heaths [4030]	
	Alpine and Boreal heaths [4060]	
	Juniperus communis formations on heaths or calcareous grasslands [5130]	
	Euphydryas aurinia (Marsh Fritillary) [1065]	
	Petalophyllum ralfsii (Petalwort) [1395]	
	Najas flexilis (Slender Naiad) [1833	
	Lutra lutra (Otter) [1355]	**Gweedore Bay & Islands SAC at its shortest distance is *c.* 3km from the Ballyness Bay SAC. Otter may migrate into the Ballyness Bay SAC and could interact with aquaculture activities – carry forward to Section 8.4.**

Natura site (Site code)	Qualifying features (habitat/species code)	Aquaculture initial screening
Tory Island Coast SAC (I02259).	Coastal lagoons [1150]	No spatial overlap or likely interaction with aquaculture activities within the Ballyness Bay SAC – excluded from further analysis.
	Reefs [1170]	
	Perennial vegetation of stony banks [1220]	
	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	
	Submerged or partially submerged sea caves [8330]	
Cloghernagore Bog and Glenveagh National Park SAC (02047)	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110]	No spatial overlap or likely interaction with aquaculture activities within the Ballyness Bay SAC – excluded from further analysis.
	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	
	Northern Atlantic wet heaths with Erica tetralix [4010]	
	European dry heaths [4030]	
	Alpine and Boreal heaths [4060]	
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410]	
	Blanket bogs (* if active bog) [7130]	
	Depressions on peat substrates of the Rhynchosporion [7150]	
	Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	
	Margaritifera margaritifera (Freshwater Pearl Mussel) [1029]	
	Salmo salar (Salmon) [1106]	
	Lutra lutra (Otter) [1355]	
	Trichomanes speciosum (Killarney Fern) [1421]	

Horn Head to Fanad Head SPA (04194)	Fulmar (*Fulmarus glacialis*) [A009] Cormorant (*Phalacrocorax carbo*) [A017] Shag (*Phalacrocorax aristotelis*) [A018] Barnacle Goose (*Branta leucopsis*) [A045] Peregrine (*Falco peregrinus*) [A103] Kittiwake (*Rissa tridactyla*) [A188] Guillemot (*Uria aalge*) [A199] Razorbill (*Alca torda*) [A200] Chough (*Pyrrhocorax pyrrhocorax*) [A346] Greenland White-fronted Goose (*Anser albifrons flavirostris*) [A395]	No spatial overlap or likely detrimental interactions of conservation features with aquaculture activities in Ballyness Bay SAC – excluded from further analysis
Falcarragh to Meenlaragh SPA (04149)	Corncrake (Crex crex) [A122]	No spatial overlap of Corncrake habitat or likely interactions with aquaculture activities in Ballyness Bay SAC – excluded from further analysis
Inishbofin, Inishdooey and Inishbeg SPA (04083)	Barnacle Goose (*Branta leucopsis*) [A045] Corncrake (*Crex crex*) [A122] Common Gull (*Larus canus*) [A182] Lesser Black-backed Gull (*Larus fuscus*) [A183] Arctic Tern (*Sterna paradisaea*) [A194]	No spatial overlap or likely detrimental interactions of conservation features with aquaculture activities in Ballyness Bay SAC – excluded from further analysis
Derryveagh and Glendowan Mountains SPA (004039)	Red-throated Diver (Gavia stellata) [A001] Merlin (Falco columbarius) [A098] Peregrine (Falco peregrinus) [A103] Golden Plover (Pluvialis apricaria) [A140] Dunlin (Calidris alpina schinzii) [A466]	No spatial overlap or likely detrimental interactions of conservation features with aquaculture activities in Ballyness Bay SAC – excluded from further analysis
Tory Island SPA (4073)	Fulmar (Fulmarus glacialis) [A009] Corncrake (Crex crex) [A122] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204]	No spatial overlap or likely detrimental interactions of conservation features with aquaculture activities in Ballyness Bay SAC – excluded from further analysis

West Donegal SPA (004150)	Fulmar (Fulmarus glacialis) Cormorant (Phalacrocorax carbo) Shag (Phalacrocorax aristotelis Peregrine (Falco peregrinus) Herring Gull (Larus argentatus) Kittiwake (Rissa tridactyla) Razorbill (Alca torda) Chough (Pyrrhocorax pyrrhocorax)	No spatial overlap or likely detrimental interactions of conservation features with aquaculture activities in Ballyness Bay SAC – excluded from further analysis
West Donegal Coast SPA (4150)	Fulmar (Fulmarus glacialis) [A009] Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Peregrine (Falco peregrinus) [A103] Herring Gull (Larus argentatus) [A184] Kittiwake (Rissa tridactyla) [A188] Razorbill (Alca torda) [A200] Chough (Pyrrhocorax pyrrhocorax) [A346	No spatial overlap or likely detrimental interactions of conservation features with aquaculture activities in Ballyness Bay SAC – excluded from further analysis

5 DETAILS OF THE PROPOSED PLANS AND PROJECTS

5.1 DESCRIPTION OF AQUACULTURE ACTIVITIES

There are no aquaculture activities in Ballyness Bay SAC. There are currently 14 applications for Pacific oyster production using the bag and trestle method only with an additional 5 applications to culture oysters (on trestles) in addition to clams under netting on the seabed in the intertidal zone. . There is a single application to culture clams (only). This assessment focuses on the proposed aquaculture activities which occur within the Qualifying Interests of (1130) Estuaries and (1140) Mudflats and sandflats not covered by seawater at low tide for which the Ballyness Bay SAC is designated. Descriptions of spatial extents of proposed intertidal aquaculture activities (provided below) within the Qualifying Interest were calculated using coordinates of activity areas in a GIS (**Figure 5.1**). The spatial extent of the proposed cultivation activities overlapping the Qualifying Interests of (1130) Estuaries and (1140) Mudflats and sandflats not covered by seawater at low tide are presented in **Table 5.1** and **Table 5.2**, while **Table 7.1** and **Table 7.2** presents spatial overlap on constituent communities of the Qualifying Interests of 1130 and 1140.

There is currently no aquaculture activity in Ballyness Bay SAC. There were two operators in 1990's that held licenses for oyster farming, but these operations are now ceased and licenses no longer valid.

5.1.1 Intertidal Clam Culture

Clam farming

It is proposed to culture the Manila Clam (*Ruditapes philippinarum*) on-bottom at six sites in intertidal areas. The seed is usually obtained in spring, April. Seed likely to be sourced from hatcheries in France or Lissadell hatchery Co. Sligo at size 8mm – 12mm and grown in trays and bags for one year after which time they are sown on intertidal ground under mesh. The netting is buried in the ground down around 10 cm and is kept in place with rope that is stapled around the edges with steel hooks. The netting is usually changed once in the cycle when mesh size is also increased. They reach harvestable market size around 3 years. They are sold onto the local and regional retail marketplace and into France.

Harvesting is carried out by tractors with modified dredges (to which sieves are attached).

5.1.2 Intertidal Oyster Cultivation

Proposed Activity

All applicants will use bag and trestle as the method of cultivation and all have identified that they will grow triploid seed in the bay which will sourced from one of the following:

1. Grain Ocean
2. Satmar
3. Guernsey Hatchery and
4. France Nissan

The overlap of proposed intertidal cultivation activities with the Qualifying Interests of 1130 and 1140 is presented in **Table 5.1** below. **Table 7.1** presents spatial overlap on constituent communities of the Qualifying Interests of 1130 and 1140.

5.1.3 Access Routes

There are a number of access routes for the operators in the area to the applied licensed sites. One is from Magheraroarty Pier to the west and one from Ballyness Pier to the east (via tractor and boat), see **Figure 5.1**. There will be tractors and trailers in use, for all applicants. For sites in the centre of the bay access with be from a public road near Ranaghmore Island. It should be noted that for sites on the western side of the bay access will be achieved from Magheraroarty Pier along established sand track that runs through Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130), with a number of points of access to the intertidal sites.

Calculation of area of the access routes in the SAC is linear length (in metres) by a putative route width of 10m, which is considered a sufficiently precautionary estimate, gives a total spatial overlap of 6.81ha. (**Figure 5.1**).

The spatial overlap of access routes on Qualifying Interests 1130 and 1140 and 2130 is presented in **Table 5.2** (while **Table 7.2** presents spatial overlap on constituent communities of Qualifying Interests of 1130 and 1140).

Table 5-1 - Spatial extent (ha) of intertidal aquaculture areas overlapping with the Qualifying Interest of Estuaries [1130] and Mudflats and sandflats not covered by seawater at low tide [1140] in the Ballyness Bay SAC (Site Code 001090). Spatial extent of licenced areas presented according to Qualifying Interest and license status.

Licence Status	Culture Species	Qualifying Interest 1130 (15.87 ha)	Qualifying Interest 1140 (688.5 ha)
		% Overlap (Overlap ha)	% Overlap (Overlap ha)
Application	Oyster	-	4.80% (33.26ha)
Application	Clam and Oyster	-	1.18% (8.1ha)
Application	Clam	-	1.3% (9ha)
Total		**-**	**7.28% (50.36ha)**

Table 5-2 - Spatial extent (ha) of intertidal access routes overlapping with the Qualifying Interest of Estuaries [1130] and Mudflats, sandflats not covered by seawater at low tide [1140] and Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] in the Ballyness Bay SAC (Site Code 001090).

Licence Status	Culture Species	Qualifying Interest 1130 (15.87 ha)	Qualifying Interest 1140 (688.5 ha)	Qualifying Interest 2130 (187.99ha)
		% Overlap (Overlap ha)	% Overlap (Overlap ha)	% Overlap (Overlap ha)
Site Access Routes		-	0.69% (4.76ha)	0.90% (1.7ha)

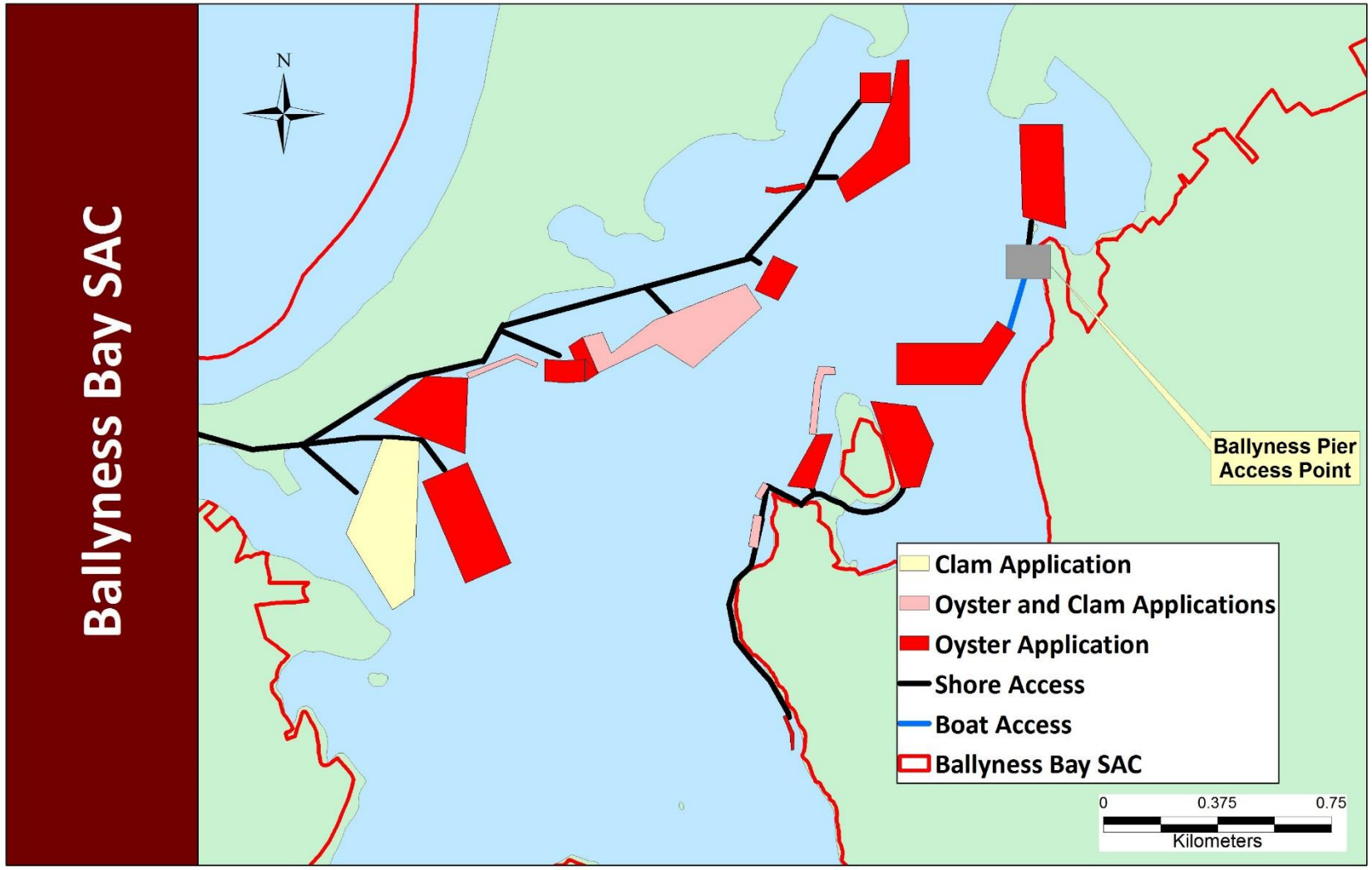

Figure 5-1: Aquaculture sites and proposed access routes in the Ballyness Bay SAC Bay (NPWS, 2014a).

6 NATURA IMPACT STATEMENT FOR THE PROPOSED ACTIVITIES

The potential ecological effects of activities on the Conservation Objectives for the site relate to the physical and biological effects of aquaculture cultivation structures and activities and human activities on designated species, intertidal habitats and invertebrate communities, and biotopes within those broad habitat types. The overall effect on the conservation status will depend on the spatial and temporal extent of fishing and aquaculture activities during the lifetime of the proposed plans and projects and the nature of each of these activities in conjunction with the sensitivity of the receiving environment. Bottom cultivation and harvesting of shellfish can, like fishing, alter the surrounding environment, both physically and biologically, not only due to the presence of the culture organisms (e.g. increased deposition, disease, shading, fouling, alien species) but also due to the activities associated with the culture mechanisms (e.g. structures resulting in current alteration, dredging, sediment compaction), the extraction of commercial and natural populations and the physical effects of dredging.

Aquaculture activities within the SAC will focus on the intertidal (bags and trestle) cultivation of the Pacific oyster, *C. gigas* and on-bottom culture of the Manila clam (*Ruditapes philippinarum*)Details of the potential biological and physical effects of this aquaculture activities on the habitat features, their sources and the mechanism by which the impact may occur are discussed below and summarised in **Table 6.1** below. The impact summaries identified in the table are derived from published primary literature and review documents that have specifically focused upon the environmental interactions of mariculture (e.g. Black 2001; McKindsey *et al.,* 2007; NRC 2010; O'Beirn *et al.,* 2012; Cranford *et al.,* 2012; ABPMer 2013a-h).

6.1 BIOLOGICAL EFFECTS OF AQUACULTURE – ALL CULTURE METHODS:

Oysters, being suspension feeding bivalve molluscs, feed at the lowest trophic level feeding largely as herbivores, relying primarily on ingestion of phytoplankton. Therefore, the culture process does not rely on the input of feedstuffs into the aquatic environment. Suspension feeding bivalves filter suspended matter from the water column and the resulting faeces and pseudofaeces (non-ingested material) are then deposited onto the seafloor, this is known as biodeposition and is a component of a greater process called benthic-pelagic coupling. This deposition can accumulate on the seafloor beneath aquaculture installations (suspended and intertidal culture) and can alter the local sedimentary habitat type in terms of organic content and particle grain size which has, in certain circumstances been shown to alter the infaunal community therein.

Moderate enrichment due to deposition can lead to increased diversity due to increased food availability; however further enrichment can lead to a change in sediment biogeochemistry (e.g. oxygen levels decrease and sulphide levels increase) which can result in a reduction in species richness and abundance resulting in a community dominated by specialist species. In extreme cases of protracted organic enrichment anoxic conditions may occur where no fauna survives and the sediment may become blanketed by a bacterial mat. Changes to the sedimentary habitat due to deposition are indicated by a decrease in oxygen levels, increased sulphide reduction, decrease in REDOX depth and particle size changes.

Several factors can affect the rate of deposition onto the seafloor; these include structure and culture density, site hydrography and site history. Oysters and clams have a "plastic response" to increased levels of suspended matter in the water column and can modify their filtration rate accordingly and thus increase the production of pseudofaeces which results in an increase in transfer of particles to

the seafloor. The degree to which the material disperses away from the footprint of the culture system (e.g. Longlines, BST Longlines, floats, trestles & bags etc.) is governed by the density of oysters/clams on the system, the depth of water and the water currents in the vicinity. It is likely that some overlap in effect will be realised. The duration and extent to which culture has been conducted on site may lead to cumulative impacts on the seabed, especially in areas where assimilation or dispersion of faeces/pseudofaeces is not rapid. A number of features of the site and culture practices will govern the speed at which faeces/pseudofaeces are assimilated or dispersed by the site. These relate to:

- Hydrography (residence time, tidal range, residual flow) govern how quickly the wastes disperse from the culture location and the density at which they will accumulate on the seafloor i.e. the greater the tidal range and residual flow then the greater the rate of dispersion and therefore the risk of accumulation is reduced.

- Turbidity in the water-the higher the water turbidity the greater the production of pseudo-faeces/faeces by the suspension feeding animal ("plastic response") and therefore greater the risk of accumulation on the seafloor.

- Density of structures-high density of culture structures (e.g. Longlines, floats, trestles & bags etc.) can result in the slowing of water currents/impediment of water flow (baffling effect), slow it down and cause localised deposition of material on the seafloor.

- Density of culture-the greater the density organisms the greater the risk of accumulations of material, suspended culture is considered a dense culture method with high densities of culture organisms over a small area. The density of culture organisms is a function of:

    - depth of the site (shallow sites have shorter droppers and hence fewer culture organisms),

    - husbandry practices – proper maintenance will result in optimum densities on the lines as well as ensuring a reduced risk of drop-off of culture animals to the seafloor as well as ensuring a sufficient distance among the longlines to reduce the risk of cumulative impacts in depositional areas.

Seston filtration-All culture methods

Suspension feeding bivalves such as oysters have a large filtration capacity and in confined areas, have been shown to alter the phytoplankton and zooplankton community abundance and structure and therefore potentially impact on the production of an area. This method of feeding may reduce water turbidity hence increasing light penetration, which may increase phytoplankton production and therefore food availability. This increase in light penetration can have positive effects on light sensitive species such as maerl, seagrass and macroalgae.

Shading Suspended culture

The structures associated with suspended culture (e.g. trestles & bags etc.) can prevent light penetration to the seabed and therefore potentially impact on light sensitive species such as maerl, seagrass and macroalgae.

Fouling/Habitat creation-All culture methods

The structures associated with aquaculture, and the culture organisms themselves provide increased habitat for fouling species to colonise and therefore increase diversity; results in increased secondary production and increased nekton production.

Introduction of Non-native species- All culture methods

Movement and introduction of bivalve shellfish can be a vector for the introduction and spread of non-native/alien species. In some instances the introduced species may proliferate rapidly and compete with and in some cases replace the native species. Recruitment of *C. gigas* has been documented in a number of bays in Ireland and appears to have become naturalised (i.e. establishment of a breeding population) in two locations (Kochmann *et al*., 2012; 2013) and may compete with the native species for space and food.

Another means is the unintentional introduction of non-native species/diseases which are associated with the imported target culture species, and their subsequent spread and establishment. These associated species are referred to as ”hitch-hikers” and include animals and plants and/or parasites and diseases that potentially could cause outbreaks within the culture species or spread to other local species.

The introduction and establishment of non-native species can result in loss of native biodiversity due to increased competition for food and habitat and also predation and/or disease.

Disease risk-All culture methods

Due to the nature of the culture methods the risk of transmission of disease from cultured to wild stocks is high, e.g. the introduction of the parasitic protozoan *Bonamia ostreae*, which has caused the mass mortality within Irish native Oyster Beds. This risk can be limited by compiling a bio security plan, screening all introduced stock prior to transferring to on growing site and also good animal husbandry. Disease risk associated with movement of shellfish is governed by Fish Health legislation on the movement of shellfish stocks into and out of culture areas and will not be considered further in this assessment.

Nutrient Exchange - All culture methods

By their suspension feeding nature, removing particulate matter from the water column and releasing nutrients in solid and dissolved forms, bivalves influence benthic-pelagic coupling of organic matter and nutrients. Intensive bivalve culture can cause changes in ammonium and dissolved inorganic nitrogen resulting in increased primary production. The removal of nitrogen from the system is caused by both removal via harvest or denitrification at sediment surface.

6.2 PHYSICAL EFFECTS OF AQUACULTURE

Current alteration-Suspended culture

The structures used in aquaculture (e.g. Longlines, floats, trestles & bags etc.) can alter the hydrodynamics of an area i.e. increase/decrease water flow, this is known as the "Baffling effect". An increase in water flow will result in scouring of the seafloor leading to an increase in coarse sediment while a decrease in current flow will result in an increase in the amount of fine particles being deposited. Both result in a change in the sedimentary habitat structure and therefore can lead to change in the composition of the benthic infaunal community.

Surface disturbance-All culture methods

All aquaculture activities physically alter the receiving habitat, but the level of this disturbance depends on the culture method employed. The culture of bivalves on the seabed (on-bottom) in an contained (clams under netting) or uncontained fashion involves the dredging of the seafloor at various stages in the culture process i.e. the collection of seed mussels and relaying of spat, routine maintenance, removal of predators ("mopping"), stock movements and finally harvesting. The frequency of dredging activity depends on site management and how often stock is moved to new ongrowing areas to maximise growth and minimise predation prior to harvest. This dredging activity physically disturbs the seafloor and the organisms therein, and has been demonstrated to cause habitat and community changes.

The intertidal culture of bivalves (e.g. Longlines, Bags & trestles) does not require dredging and therefore is less damaging (physically) to the seafloor than the bottom culture method. However, the intertidal (and coastal) habitat can be affected by ancillary activities on-site i.e. servicing, vehicles on shore; human traffic and boat access lanes, causing an increased risk of sediment compaction resulting in sediment changes and associated community (infaunal and epifaunal) changes. Such activities can result in shallow and/or deep physical disturbance causing burrows to collapse, deeply burrowed organisms to die due to smothering and/or preventing siphon connection to the sediment surface or by directly crushing the animal. The travel of large vehicles over dune habitat can also result in erosion compaction and damage.

Shading-Suspended culture

The structure associated with suspended culture (e.g. netting, Longlines, floats, trestles & bags etc.) have the potential to prevent light penetration to the seabed and therefore potentially impact on light sensitive species such as maerl, seagrass and macroalgae.

Table 6-1 - Potential indicative environmental pressures of proposed aquaculture activities within the Qualifying Interests of Estuaries [1130] and Mudflats and sandflats not covered by seawater at low tide [1140] of the Ballyness Bay SAC.

Activity	Pressure category	Pressure	Potential effects	Equipment / Gear	Duration (days)	Time of year	Factors constraining the activity
Intertidal Oyster Culture and Clams	Physical	Current alteration	Structures may alter the current regime and resulting increased deposition of fines or scouring.	Netting, Trestles and bags and service equipment	365	All year	At low tide only
		Surface disturbance	Ancillary activities at sites, e.g. harvesting, servicing, transport increase the risk of sediment compaction resulting in sediment changes and associated community changes.				
		Shading	Prevention of light penetration to seabed potentially impacting light sensitive species				
	Biological	Non-native species introduction	Potential for non-native species (*C. gigas*) to reproduce and proliferate in SAC. Potential for alien species to be included with culture stock (hitch-hikers).				
		Disease risk	In event of epizootic the ability to manage disease in uncontained subtidal oyster populations is compromised.				
		Organic enrichment	Faecal and pseudofaecal deposition on seabed potentially altering community composition				

7 SCREENING OF AQUACULTURE ACTIVITIES

A screening assessment is an initial evaluation of the possible impacts that activities may have on the Qualifying Interests. The screening process is a filter, which may lead to exclusion of certain activities or Qualifying Interests from further assessment, thereby simplifying the process. Screening is a conservative filter that minimises the risk of false negatives.

In this report, screening of the Qualifying Interests against the proposed activities is based primarily on spatial overlap i.e. if the Qualifying Interests overlap spatially with the proposed activities then impacts due to these activities on the Conservation Objectives for the Qualifying Interests is not discounted (not screened out) except where there is absolute and clear rationale for doing so. Conversely, if there is no spatial overlap and no obvious interaction is likely to occur, then the possibility of significant impact is discounted and further assessment of possible effects is not deemed necessary.

Table 5.1 and **Table 5.2** highlights the spatial overlap between proposed intertidal aquaculture activities, and the habitat features of (1130) Estuaries and (1140) Mudflats and sandflats not covered by seawater at low tide and Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130], while **Table 7.1** and **Table 7.2** presents spatial overlap on constituent community types of the habitat features of 1130 and 1140.

7.1 AQUACULTURE ACTIVITY SCREENING

Where the overlap between intertidal aquaculture activities, and a feature is zero and there is no likely interaction of risk identified, it is screened out and not considered further. Therefore, the following habitats and species are excluded from further consideration in this assessment:

- Estuaries [1130]
- Embryonic shifting dunes [2110]
- Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]
- Humid dune slacks [2190]
- *Vertigo geyeri* (Geyer's Whorl Snail) [1013]

Overlap between an access route and coastal habitat designated as Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] occurs from Magheraroarty Pier. The access route follows an established track through the dunes system at Magheraroarty (Figure 5-1). The risk of additional heavy vehicular traffic on a bare sand route could lead to increased erosion of dune habitat. Therefore, the interaction between aquaculture activities and Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] is carried forward for further consideration in this assessment.

When overlap was confirmed it was quantified in a GIS application and presented on the basis of coverage of specific activity representing different pressure types (e.g. intertidal oyster cultivation) and licence status (all are applications) intersecting with designated conservation features and/or sub-features (community types) (see **Table 7.1** and **Table 7.2**).

Table 7.1 below provides estimates of overlap of aquaculture activities and specific marine community types (identified from Conservation Objectives (i.e. NPWS, 2014a) within the broad habitat features of (1140) Mudflats and sandflats not covered by seawater at low tide.

Table 7-1 - Habitat utilisation i.e. spatial overlap in percentage and hectares (given in parentheses) of intertidal oyster and clam cultivation activity and access routes over community types within the Qualifying Interest 1140 (i.e. Mudflats and sandflats not covered by seawater at low tide) in the Ballyness Bay SAC. Spatial data based on licence database provided by DAFM. Habitat data provided in NPWS 2014b.

Licence Status	**Culture Species**	**Qualifying Interest 1140 (688.5 ha)**	
		Community Type	
		Coarse sediment to sandy mud with oligochaetes and polychaetes community complex (120.9ha)	**Mobile sand community complex (567.6ha)**
		Overlap % (Overlap ha)	**Overlap % (Overlap ha)**
Application	Oyster	3.77% (4.56ha)	5.1% (28.7ha)
Application	Clam	-	1.6% (9ha)
Application	Oyster and Clam	0.28% (0.35ha)	1.37% (7.75ha)
Site Access Routes		1.2% (1.43ha)	0.59% (3.33ha)
Total		**5.25% (6.34ha)**	**8.66% (48.78ha)**

8 ASSESSMENT OF AQUACULTURE ACTIVITIES

8.1 DETERMINING SIGNIFICANCE

The function of an appropriate assessment is to determine if the ongoing and proposed aquaculture activities are consistent with the Conservation Objectives for the Natura site or if such activities will lead to deterioration in the attributes of the habitats and species over time and in relation to the scale, frequency and intensity of the activities. NPWS (2014c) provide guidance on interpretation of the Conservation Objectives which are, in effect, management targets for habitats and species in the SAC. This guidance is scaled relative to the anticipated sensitivity of habitats and species to disturbance by the proposed activities. Some activities are deemed to be wholly inconsistent with long term maintenance of certain sensitive habitats while other habitats can tolerate a range of activities. For the practical purpose of management of sedimentary habitats a 15% threshold of overlap between a disturbing activity and a habitat is given in the NPWS guidance. Below this threshold disturbance is deemed to be non-significant. Disturbance is defined as that which leads to a change in the characterizing species of the habitat (which may also indicate change in structure and function). Such disturbance may be temporary or persistent in the sense that change in characterizing species may recover to pre-disturbed state or may persist and accumulate over time.

The significance of the possible effects of the proposed activities on habitats, as outlined in the Natura Impact Statement (**Section 6**) and subsequent screening exercise (**Section 7**), is determined here in the assessment. The significance of effects is determined on the basis of Conservation Objective guidance for constituent habitats and species (**Figures 4.4** and NPWS 2014a, 2014b, 2014c).

Within the Ballyness Bay SAC the qualifying habitats/species considered subject to potential disturbance and, therefore, carried further in this assessment are:

- 1140 Mudflats and sandflats not covered by seawater at low tide

For broad habitats and community types (**Figures 4.2, 4.3, 4.4**) significance of impact is determined in relation to, first and foremost, spatial overlap (see **Section 5**; **Table 5.1, 5.2** and **Section 7**; **Table 7.1, 7.2**). Subsequent disturbance and the persistence of disturbance are considered as follows:

1. The degree to which the activity will disturb the Qualifying Interest. By disturb is meant change in the characterising species, as listed in the Conservation Objective guidance (NPWS 2014b) for constituent communities. The likelihood of change depends on the sensitivity of the characterising species to the activities in question. Sensitivity results from a combination of intolerance to the activity and/or recoverability from the effects of the activity (see **Section 8.2** below).

2. The persistence of the disturbance in relation to the intolerance of the community. If the activities are persistent (high frequency, high intensity) and the receiving community has a high intolerance to the activity (i.e. the characterising species of the communities are sensitive and consequently impacted) then such communities could be said to be persistently disturbed.
3. The area of communities or proportion of populations disturbed. In the case of community disturbance (continuous or ongoing) of more than 15% of the community area it is deemed to be significant. This threshold does not apply to the sensitive habitat *Zostera* where any spatial overlap of activities should generally be avoided.

Effects will be deemed to be significant when cumulatively they lead to long term change (persistent disturbance) in broad habitat/features (or constituent communities) resulting in an impact greater than 15% of the area.

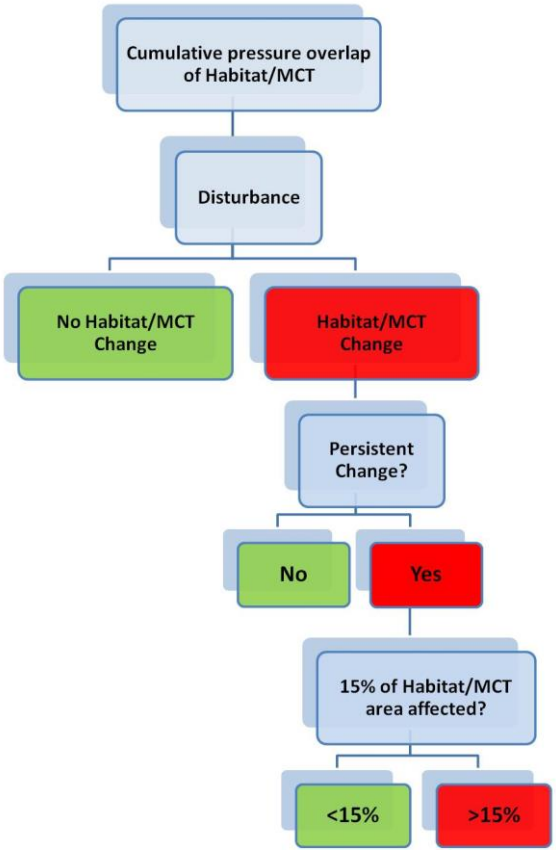

Figure 8-1 - Determination of significant effects on community distribution, structure and function for sedimentary habitats (following NPWS 2014b).

In relation to the designated species *Halichoerus grypus* (Grey Seal) [1364] and *Lutra lutra* (Otter) [1355]; the capacity of the species population to maintain themselves in the face of anthropogenic induced disturbance or mortality at the site will need to be taken into account in relation to the Conservation Objectives for the species on a case-by-case basis.

8.2 SENSITIVITY AND ASSESSMENT RATIONALE

This assessment used a number of sources of information in assessing the sensitivity of the characterising species of each community recorded within the benthic habitats of Ballyness Bay SAC. One source of information is a series of reviews commissioned by the Marine Institute which identify habitat and species sensitivity to a range of pressures likely to result from aquaculture and fishery activities (ABPMer 2013a-h). These reviews draw from the broader literature, including the MarLIN Sensitivity Assessment (Marlin.ac.uk) and the AMBI Sensitivity Scale (Borja et al 2000) and other primary literature. It must be noted that NPWS have acknowledged that given the wide range of community types that can be found in marine environments, the application of conservation targets to these would be difficult (NPWS 2014b). On this basis, NPWS have proposed broad community complexes as management units. These complexes (for the most part) are very broad in their description and do not have clear surrogates which might have been considered in targeted studies and thus reported in the scientific literature. On this basis, the confidence assigned to likely

interactions of the community types with anthropogenic activities are by necessity relatively low, with the exception of community types dominated by sensitive taxa, e.g. Mearl and *Zostera*. Other literature cited in the assessment does provide a greater degree of confidence in the conclusions. For example, the output of recent studies has provided greater confidence in terms of assessing likely interactions between intertidal oyster culture and marine habitats (Forde et al 2015; O'Carroll et al 2016). Sensitivity of a species to a given pressure is the product of the intolerance (the susceptibility of the species to damage, or death, from an external factor) of the species to the particular pressure and the time taken for its subsequent recovery (recoverability is the ability to return to a state close to that which existed before the activity or event caused change). Life history and biological traits are important determinants of sensitivity of species to pressures from aquaculture.

In the case of species, communities and habitats of conservation interest, the separate components of sensitivity (intolerance, recoverability) are relevant in relation to the persistence of the pressure:

- For persistent pressures i.e. activities that occur frequently and throughout the year recovery capacity may be of little relevance except for species/habitats that may have extremely rapid (days/weeks) recovery capacity or whose populations can reproduce and recruit in balance with population damage caused by aquaculture. In all but these cases and if sensitivity is moderate or high then the species/habitats may be negatively affected and will exist in a modified state. Such interactions between aquaculture and species/habitat/community represent persistent disturbance. They become significantly disturbing if more than 15% of the community is thus exposed (NPWS 2014a).

- In the case of episodic pressures i.e. activities that are seasonal or discrete in time both the intolerance and recovery components of sensitivity are relevant. If sensitivity is high but recoverability is also high relative to the frequency of application of the pressure then the species/habitat/community will be in Favourable Conservation Status for at least a proportion of time.

The sensitivities of the community types (or surrogates) found within the Ballyness Bay SAC to pressures similar to those caused by aquaculture (e.g. smothering, organic enrichment and physical disturbance) are identified in **Table 8.1**. The sensitivities of species which are characteristic (as listed in the Conservation Objective supporting document) of benthic communities to pressures similar to those caused by aquaculture (e.g. smothering, organic enrichment and physical disturbance) are identified, where available, in **Table 8.2**. The following guidelines broadly underpin the analysis and conclusions of the species and habitat sensitivity assessment:

- Sensitivity of certain taxonomic groups such as emergent sessile epifauna to physical pressures is expected to be generally high or moderate because of their form and structure (Roberts et al 2010). Also high for those with large bodies and with fragile shells/structures, but low for those with smaller body size. Body size (Bergman and van Santbrink 2000) and fragility are regarded as indicative of a high intolerance to physical abrasion caused by fishing gears (i.e. dredges). However, even species with a high intolerance may not be sensitive to the disturbance if their recovery is rapid once the pressure has ceased.

- Sensitivity of certain taxonomic groups to increased sedimentation is expected to be low for species which live within the sediment, deposit and suspension feeders; and high for those sensitive to clogging of respiratory or feeding apparatus by silt or fine material.

- Recoverability of species depends on biological traits (Tillin et al 2006) such as reproductive capacity, recruitment rates and generation times. Species with high reproductive capacity, short generation times, high mobility or dispersal capacity may maintain their populations even when faced with persistent pressures; but such environments may become dominated by these (r-selected) species. Slow recovery is correlated with slow growth rates, low fecundity, low and/or irregular recruitment, limited dispersal capacity and long generation times. Recoverability, as listed by MarLIN, assumes that the impacting factor has been removed or stopped and the habitat returned to a state capable of supporting the species or community in question. The recovery process is complex and therefore the recovery of one species does not signify that the associated biomass and functioning of the full ecosystem has recovered (Anand and Desrocher, 2004) cited in Hall et al 2008).

8.3 ASSESSMENT OF THE EFFECTS OF AQUACULTURE PRODUCTION ON THE CONSERVATION OBJECTIVES FOR HABITAT FEATURES IN THE BALLYNESS BAY SAC.

Aquaculture pressures on a given habitat are related to vulnerability (spatial overlap or exposure of the habitat to the equipment/culture organism combined with the sensitivity of the habitat) to the pressures induced by culture activities. To this end, the location and orientation of structures associated with the culture organism, the density of culture organisms, the duration of the culture activity are all important considerations when considering risk of disturbance of intertidal aquaculture to habitats and species.

NPWS (2014a) provide lists of species characteristic of benthic communities occurring within Annex I features that are defined in the Conservation Objectives.

The constituent communities identified in the broad Annex 1 feature of (1140) Mudflats and sandflats not covered by seawater at low tide) are:

- Coarse sediment to sandy mud with oligochaetes and polychaetes community complex
- Mobile sand community complex

For **(1140) Mudflats and sandflats not covered by seawater at low tide** there are a number of attributes (with associated targets) relating to the following broad habitat features as well as constituent community types;

1. **Habitat Area -** it is unlikely that the activities proposed will reduce the overall extent of permanent habitat within the feature (1140) Mudflats and sandflats not covered by seawater at low tide. The habitat area is likely to remain stable.

2. **Community Distribution - (conserve a range of community types in a natural condition) -** this attribute considered interactions with the community types listed above. **Table 8.1** below indicates the community types, found within the Qualifying Interests of 1140 that are considered further as part of the assessment (i.e. community types which overlap with current and existing aquaculture activities).

Table 8-1 - Community types recorded in Ballyness Bay SAC and the Annex I habitats of (1140) Mudflats and sandflats not covered by seawater at low tide that overlap with overlap with current and existing aquaculture activities

Feature	Community Type	Overlap with intertidal oyster cultivation activities*	Overlap with intertidal clam cultivation*
Mudflats and sandflats not covered by seawater at low tide (1140)	Coarse sediment to sandy mud with oligochaetes and polychaetes community complex	✓	✓
	Mobile sand community complex	✓	✓

* Includes access routes

For community types listed under 1130 **Table 8.2** lists the habitats and **Table 8.3** lists the constituent taxa and both provide a commentary of sensitivity to a range of pressures. The risk scores are derived from a range of sources identified above. The pressures are listed as those likely to result from intertidal oyster culture (bags and trestle) and intertidal clam cultivation within the SAC.

The likely interactions between (existing and proposed) intertidal oyster cultivation and intertidal clam cultivation aquaculture activities and the broad habitat feature of 1130 and 1140 and their constituent community types are described in **Table 8.5** together with broad conclusions and justifications on whether the activities in isolation and/or cumulatively are considered disturbing to the feature in question. It must be noted that the sequence of distinguishing disturbance is as highlighted above, whereby activities with spatial overlap on habitat features are assessed further for their ability to cause persistence disturbance on the habitat. If persistent disturbance is likely then the spatial extent of the overlap is considered further.

Intertidal oyster cultivation

The spatial overlap of proposed oyster cultivation sites and the constituent community types Coarse sediment to sandy mud with oligochaetes and polychaetes community complex and Mobile sand community complex identified for the Qualifying Feature habitats of 1140, ranges from 4.05% and 6.47%, respectively (**Table 7.1**). Published literature (Forde *et al*., 2015; O'Carroll *et al.,* 2016) suggests that the presence of bags on trestles is considered non-disturbing to the community type, Coarse sediment to sandy mud with oligochaetes and polychaetes community complex. The sensitivity of the community type Mobile sand community complex, is unknown given the wide variation in species composition and sedimentary characteristics that comprise this community type (NPWS 2014b). While some characteristics of this community type match those described and investigated in Forde et al (2015) and O'Carroll et al (2016) others are quite different. In particular, areas where there are very 'soft' mobile sands with impoverished communities would appear to be sensitive to the placement of trestles and even foot traffic among the trestle rows. On this basis, it is assumed that intertidal shellfish culture has the potential to disturb this community type.

Clam Cultivation

Clam culture will overlap only one marine community type found Clam culture may result in more chronic and long-term changes in community composition which were considered during the assessment process. High density clam culture may result in exclusion of native fauna and build-up of sedimentary material as a consequence of the netting. In addition, the harvest method employed using modified dredges attached to tractors is considered highly disturbing to all sedimentary marine community types.

Access Routes

The access routes used in intertidal areas, presumably by virtue of persistent compaction of the sedimentary habitats, are considered disturbing (De-Grave *et al.,* 1998; Forde *et al.,* 2015; O'Carroll *et al*., 2016). The access routes proposed for aquaculture sites will travel over both community types found in the Qualifying Interest (1140) Mudflats and sandflats not covered by seawater at low tide (see **Figure 4.4** and **Table 7.2**). For the Qualifying Interests 1140 the spatial overlap of the access routes with the constituent community type of Mobile sand community complex is 0.59% and for Coarse sediment to sandy mud with oligochaetes and polychaetes community complex is 1.2%.

Introduction of non-native species

As already outlined oyster culture may present a risk in terms of the introduction of non-native species as the Pacific oyster (*Crassostrea gigas*) itself is a non-native species. Recruitment of *C. gigas* has been documented in a number of Bays in Ireland and appears to have become naturalised (i.e. establishment of a breeding population) in two locations (Kochmann *et al.,* 2012; 2013) and may compete with the native species for space and food. In addition to having large number of oysters in culture, Kochmann *et al*. (2013) identified short residence times and large intertidal areas as factors likely contributing to the successful recruitment of oysters in Irish bays. The risk of Pacific oysters naturalising in Ballyness Bay **cannot be discounted.**

While there is minimal risk associated with the introduction of hitchhiker species with hatchery reared oyster seed. A risk of alien species introductions presents if '½-grown' or 'wild' seed originating from another jurisdiction (e.g. Britain, France) is introduced to the sites. However, it is noted that hatchery seed will only be used in the bay so the risk posed by the transfers of other sources of stock can be discounted.

In relation to the Manila clam (*Ruditapes philippinarum*), this species has been in culture in Ireland since 1984 and, to the best of our knowledge, no recruitment in the wild has been recorded. The operations are totally reliant on hatchery seed and are fully contained at all stages of the production cycle and given the short residence times calculated for the SAC, the risk of naturalisation of this species is considered low, but should be kept under surveillance.

For **(2130) Fixed coastal dunes with herbaceous vegetation (grey dunes)** there are a number of attributes (with associated targets) relating to this feature that would likely interact with the pressures deriving from the use of the habitat as a means to access the sites proposed for aquaculture purposes (Table 5.2 and Figure 8-2). While it is acknowledged that the access routes proposed will follow (for the most part) existing paths (currently subject to vehicular and pedestrian traffic), the licencing of aquaculture activity at this site could lead to additional risk of erosion and degradation of this dune habitat [2130]. The risk of damage from vehicular traffic to dune habitat (2130) in Ballyness Bay therefore, **cannot be discounted.**

Figure 8-2 Access route overlap with Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130].

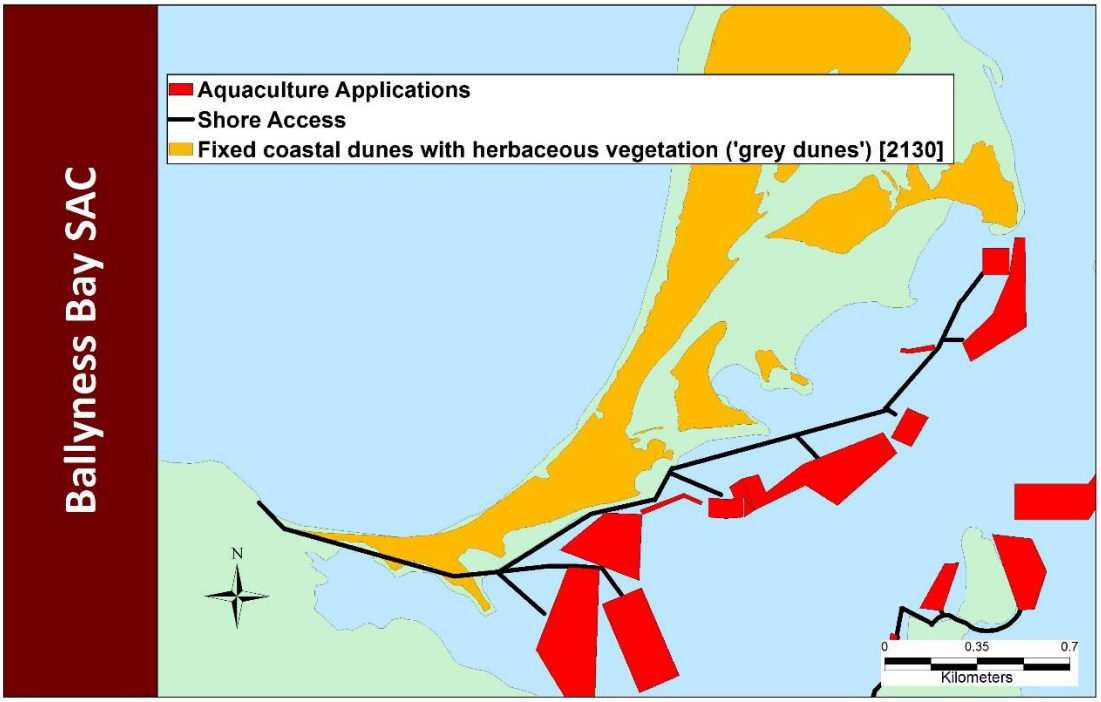

Table 8-2 - Matrix showing the characterising habitats sensitivity scores x pressure categories for habitats (or surrogates) in Ballyness Bay SAC (ABPMer 2013a-h) (**Table 8.4** provides the code for the various categorisation of sensitivity and confidence.)

Community Type (Surrogate [EUNIS code])	Surface Disturbance	Shallow Disturbance	Deep Disturbance	Trampling – access by foot	Trampling – access by vehicle	Extraction	Siltation (addition of fine sediments, pseudofaeces, fish food)	Smothering (addition of materials biological or non-biological to the surface)	Changes to sediment composition- increased coarseness	Changes to sediment composition- increased fine sediment proportion	Changes to water flow	Increase in turbidity/suspended sediment	Decrease in turbidity/suspended sediment	Organic enrichment-water column	Organic enrichment of sediments-sedimentation	Increased removal of primary production-phytoplankton	Decrease in oxygen levels- sediment	Decrease in oxygen levels-water column	Introduction of non-native species	Removal of Target Species	Removal of Non-target species	Introduction of antifoulants	Introduction of medicines	Introduction of hydrocarbons	Prevention of light reaching seabed/features
Coarse sediment to sandy mud with oligochaetes and polychaetes community complex (Polychaete / amphipod dominated sand shores [A2.23]/ Polychaete/bivalve-dominated muddy sand shores [A2.24])	NS **/ NS ***	L **	L **/ L ***	NS **	L-NS **/ L **	L-M *	L-M *	L-M *	L-M *	M */ NS *	L-M *	NS */ NS	NS *	NS *	NS *	NS *	L-NS */L *	L-NS */ L *	NS *** / H ***	NS *	NS *	NS *	NS *	L *	NS *
Mobile sand community complex (Polychaete / amphipod dominated sand shores [A2.23]/ Infralittoral Fine Sand [A5.23])	NS *	L *	L *	NS */ NE	L-NS */ NE	L-M *	L-M *	L-M *	L-M *	M *	L-M *	NS *	NS *	NS *	NS *	NS *	L-NS */L-NS ***	L-NS */L-NS ***	NS ***	NS *	NS *	NS *	NS *	L *	NS *

Table 8-3 - Matrix showing the characterising species sensitivity scores x pressure categories for species in Ballyness Bay SAC (ABPMer 2013a-h) (**Table 8.4** provides the code for the various categorisation of sensitivity and confidence.)

Community Type (Surrogate [EUNIS code])	Species (characterizing species identified from NPWS 2014b)	Surface Disturbance	Shallow Disturbance	Deep Disturbance	Trampling – access by foot	Trampling – access by vehicle	Extraction	Siltation (addition of fine sediments, pseudofaeces, fish food)	Smothering (addition of materials biological or non-biological to the surface)	Changes to sediment composition- increased coarseness	Changes to sediment composition- increased fine sediment proportion	Changes to water flow	Increase in turbidity/suspended sediment	Decrease in turbidity/suspended sediment	Organic enrichment-water column	Organic enrichment of sediments-sedimentation	Increased removal of primary production-phytoplankton	Decrease in oxygen levels- sediment	Decrease in oxygen levels-water column	Introduction of non-native species	Removal of Target Species	Removal of Non-target species	Introduction of antifoulants	Introduction of medicines	Introduction of hydrocarbons	Prevention of light reaching seabed/features
Coarse sediment to sandy mud with oligochaetes and polychaetes community complex (Polychaete / amphipod dominated sand shores [A2.23]/ Polychaete/bivalve-dominated muddy sand shores [A2.24])	*Tubificoides benedii*	NS *	NS *	L **	L *	L *	M *	NS *	L *	NS *	NS *	NS ***	NS *	NS *	NS ***	NS ***	NS *	NS ***	NS ***	NS *	NS *	NS *	NS **	NEv	NEv	NS **
	Pygospio elegans	L *	L **	M ***	L *	L *	L-M *	L ***	L-M ***	L-M *	NS **	L-M *	NS *	NS *	NS *	NS ***	NS *	L **	L **	M *	NS *	NS *	NS *	NEv	NEv	NS *
	Hediste diversicolor	NS *	L-M **	L-H **	NS *	L *	L-H *	NS ***	L-M *	M-H *	NS *	NS *	NS *	NS *	NS **	NS **	NS *	NS **	NS **	L-M *	L-M *	NS *	NS *	M-H **	M-H **	NS *
	Nematode indet.	NS ***	NS ***	NS ***	NS ***	NS *	L *	NS *	NS ***	NS ***	NS ***	NS *	NS *	NS *	NS *	NS ***	NS *	L ***	L ***	NS ***	NS *	L *	NS ***	NEv	L ***	NS *
	Capitella sp.	L *	L **	L **	L ***	L *	L *	L *	NS *	NS *	NS ***	NS *	NS *	NS *	NS ***	NS ***	NS *	L ***	L ***	NS *	NS *	NS *	NS **	L ***	NS ***	NS *
Mobile sand community complex (Polychaete /	*Angulus tenuis*	NS *	L *	L ***	NS *	L *	M *	NS *	H*	M-H *	NS *	L-M *	L *	NS *	NS *	NEv	L-NS *	NEv	NEv	M *	NS *	NS *	NS *	NEv	NEv	NS *

Prevention of light reaching seabed/features	NS *
Introduction of hydrocarbons	NS ***
Introduction of medicines	NEv
Introduction of antifoulants	NS *
Removal of Non-target species	NS *
Removal of Target Species	NS *
Introduction of non-native species	M *
Decrease in oxygen levels-water column	L *
Decrease in oxygen levels- sediment	L *
Increased removal of primary production-phytoplankton	NS *
Organic enrichment of sediments-sedimentation	NS ***
Organic enrichment-water column	NS *
Decrease in turbidity/suspended sediment	NS *
Increase in turbidity/suspended sediment	NS *
Changes to water flow	NS *
Changes to sediment composition- increased fine sediment proportion	NS *
Changes to sediment composition- increased coarseness	NS *
Smothering (addition of materials biological or non-biological to the surface)	L-M ***
Siltation (addition of fine sediments, pseudofaeces, fish food)	L-M ***
Extraction	L-M *
Trampling – access by vehicle	NS *
Trampling – access by foot	NS *
Deep Disturbance	NS *
Shallow Disturbance	NS ***
Surface Disturbance	NS *
Species (characterizing species identified from NPWS 2014b)	Scolelepis squamata
Community Type (Surrogate [EUNIS code])	amphipod dominated sand shores [A2.23]/ Infralittoral Fine Sand [A5.23])

Table 8-4 - Codes of sensitivity and confidence applying to species and pressure interactions presented in **Tables 8.1** and **8.2**.

Pressure interaction codes for Table 8.1 and 8.2	
NA	Not Assessed
Nev	No Evidence
NE	Not Exposed
NS	Not Sensitive
L	Low
M	Medium
H	High
VH	Very High
*	Low confidence
**	Medium confidence
***	High Confidence

Table 8-5 - Interactions between proposed aquaculture activities and constituent communities of the habitat features of (1140) Mudflats and sandflats not covered by seawater at low tide with a broad conclusion on the interactions.

Licence Status	Culture Species	Qualifying Interest 1140 (688.5 ha)	
		Coarse sediment to sandy mud with oligochaetes and polychaetes community complex (120.9ha)	**Mobile sand community complex (567.6ha)**
Application	Oyster Sites	**Disturbing: No** **Justification:** The spatial overlap with the community type is low at 3.77%. Published literature (Forde *et al.*, 2015) suggests that activities occurring at trestle culture sites are not disturbing.	**Disturbing: No** **Justification:** The spatial overlap with the community type is low at 5.1%. Published literature (Forde *et al.,* 2015) suggests that activities occurring at trestle culture sites are not disturbing.
Application	Oyster and Clam Sites	**Disturbing: Yes** **Justification:** Compaction by vehicles and harvest methods using dredges can lead to change in community composition. The spatial overlap with the community type is 0.28%.	**Disturbing: Yes** **Justification:** Compaction by vehicles and harvest methods using dredges can lead to change in community composition. The spatial overlap with the community type is 1.37%.
Application	Clam	**N/A**	**Disturbing: Yes** **Justification:** disturbance by site preparation and harvesting techniques can lead to change in community composition The spatial overlap with the community type is 1.6%.
Access Routes		**Disturbing: Yes** **Justification:** Compaction by vehicles can lead to change in community composition The spatial overlap with the community type is 1.2%.	**Disturbing: Yes** **Justification:** Compaction by vehicles can lead to change in community composition The spatial overlap with the community type is 0.59%.
Cumulative Impact of Proposed Aquaculture Activity		**Disturbing: No** **Justification:** The overall spatial overlap of likely disturbing activity with the community type is 1.48%. This value is below the spatial overlap threshold (15%) for significant adverse impacts of on this community type.	**Disturbing: No** **Justification:** The overall spatial overlap of likely disturbing activity with the community type is 3.56%. This value is below the spatial overlap threshold (15%) for significant adverse impacts of on this community type.

8.4 ASSESSMENT OF THE EFFECTS OF AQUACULTURE PRODUCTION ON THE CONSERVATION OBJECTIVES FOR OTTER *LUTRA LUTRA* IN THE GWEEDORE AND ISLANDS SAC.

Gweedore Bay and Islands SAC, which is *c.* 1.7km west of Ballyness Bay SAC, is designated for the otter (*Lutra lutra*); Conservation Objectives for the species within the SAC have been defined by NPWS and primarily relate to population size and distribution (NPWS, 2015a). It is acknowledged in this assessment that the favourable conservation status of the otter has been achieved (NPWS 2015a) in the Gweedore Bay and Islands SAC given current absence of aquaculture production within the Ballyness Bay SAC.

As the proposed aquaculture production activities within the Ballyness Bay SAC do not spatially overlap with otter territory in the Gweedore Bay and Islands SAC, individuals may migrate into the Ballyness Bay SAC and as a result experience disturbances from the proposed aquaculture activities in the bay.

The risk of negative interactions between aquaculture operations and aquatic mammal species is a function of:

1. The location and type of structures used in the culture operations- is there a risk of entanglement or physical harm to the animals from the structures?

2. The schedule of operations on the site – is the frequency such that they can cause disturbance to the animals?

Shellfish Culture: Shellfish culture operations are likely to be carried out in daylight hours. The interaction with the otter is likely to be minimal given that otter foraging is primarily crepuscular. It is unlikely that these culture types pose a risk to otter populations from the Gweedore Bay and Islands SAC.

Impacts from intertidal oyster and clam cultivation can be discounted on the basis that the proposed activities will not lead to any modification of the following attributes for otter:

- Extent of habitat (terrestrial, marine and/or freshwater habitat).

- The activity involves net input rather than extraction of fish biomass so that no negative impact on the essential food base (fish biomass) is expected

- The number of couching sites and holts or, therefore, the distribution, will not be directly affected by aquaculture and fisheries activities.

- Shellfish production activities are unlikely to pose any risk to otter populations through entrapment or direct physical injury.

- The oyster culture structures are raised from the seabed (0.5m -1m) and are oriented in rows, thus allowing free movement through and within the site.

- Disturbance associated with vessel and foot traffic at aquaculture cultivation sites could potentially affect the distribution of otters at the site. However, the level of disturbance

is likely to be very low given the likely encounter rates will be low dictated primarily by tidal state and in daylight hours.

On the basis of location and timing of activities, the proposed levels of licenced shellfish culture are considered **non-disturbing** to otter conservation features in the Gweedore Bay and Islands SAC.

8.5 ASSESSMENT OF THE EFFECTS OF AQUACULTURE PRODUCTION ON THE CONSERVATION OBJECTIVES FOR GREY SEAL *HALICHOERUS GRYPUS* IN THE HORN HEAD AND RINCLEVAN SAC.

The Horn Head and Rinclevan SAC is designated for the grey seal (*Halichoerus grypus*); Conservation Objectives for the species within the SAC sites have been defined by NPWS and primarily relate to the requirement to maintain various attributes of the populations including population size and the distribution of the species (NPWS 2014d). It is acknowledged in this assessment that the favourable conservation status of the grey seal has been achieved (NPWS 2014d) given current absence of aquaculture production within the Ballyness Bay SAC.

The proposed aquaculture activities must be considered in light of the following attributes and measures for the grey seal:

- Access to suitable habitat – number of artificial barriers
- Disturbance – frequency and level of impact
- Harbour seal Sites:
    - Breeding sites
    - Moulting sites
    - Resting sites

Restriction to suitable habitats and levels of disturbance are important pressures that must be considered to ensure the maintenance of favourable conservation status of the grey seal and implies that the seals must be able to move freely within the site and to access locations considered important to the maintenance of a healthy population. They are categorised according to various life history stages (important to the maintenance of the population) during the year. Specifically they are breeding, moulting and resting sites. It is important that the access to these sites is not restricted and that disturbance, when at these sites, is kept to a minimum. Activities at culture sites and during movement to and from culture sites may result in disturbance events such that the seals may note an activity (head turn), move towards the water or actually flush into the water. While such disturbance events might have been documented, the impact of these disturbances at the population level has not been studied more broadly (National Research Council, 2010).

All of the proposed aquaculture production activities within Ballyness Bay SAC are >10km from the documented breeding, moulting and resting sites of the grey seal in the Horn Head and Rinclevan SAC and therefore, are unlikely to impact on the attributes relating to the site. Notwithstandnig, local observations have identified a specific haul-out within Ballyness Bay. In particular, seals have been observed on a large sand bank in the centre of the Bay (Figure 8-2). Given that there are currently no aquaculture operations in Ballyness Bay, it is not certain that the introduction of significant levels of aquaculture operations will not impact on the site use by these Annex II species, in particular at those

locations proximate to the this haul-out location. Therefore, the risk posed by the proposed aquaculture activities in Ballyness Bay to seal conservation features cannot be discounted.

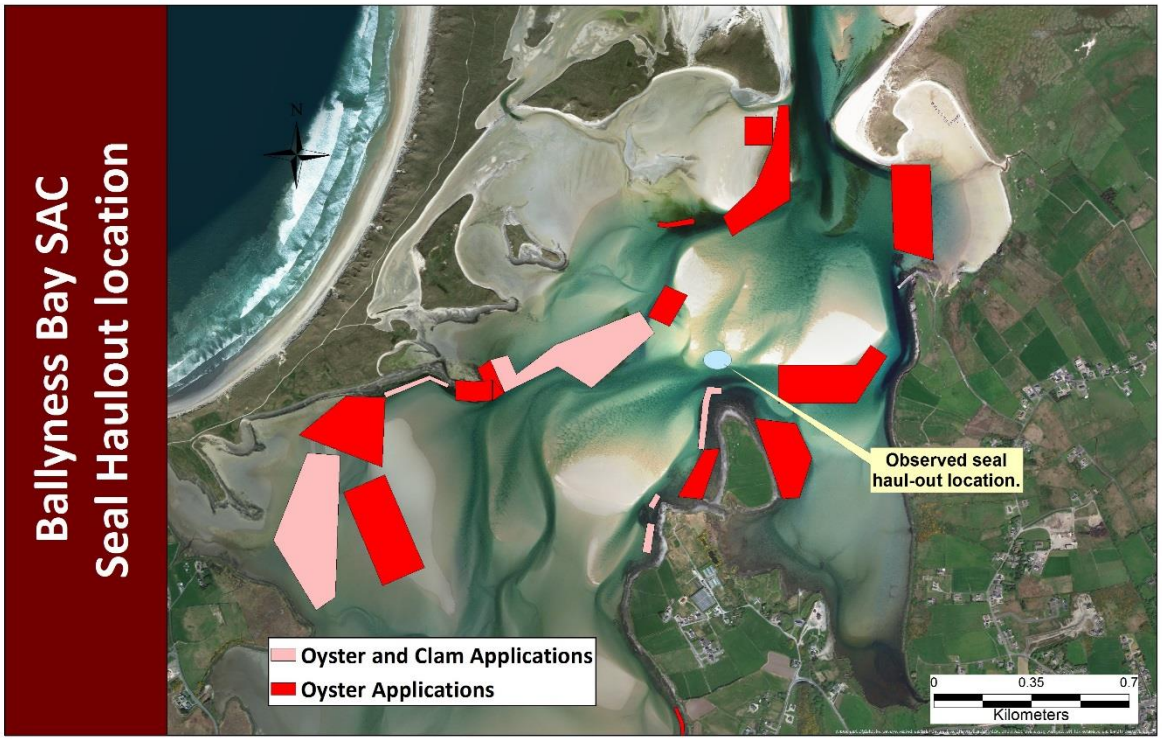

Figure 8-3 Location of observed seal haul-out in Ballyness Bay.

9 IN-COMBINATION EFFECTS OF AQUACULTURE, FISHERIES AND OTHER ACTIVITIES

9.1 FISHERIES

There are no fishing activities within Ballyness Bay SAC and therefore there are no likely in-combination effects.

9.2 POLLUTION PRESSURES

There are a number of activities which are terrestrial in origin that might result in impacts on the conservation features of the Ballyness Bay SAC. Primary among these are point source discharges from domestic sewage outfalls distributed along the bay and municipal urban waste water treatment plants. The pressure derived from these point sources may impact upon levels of dissolved nutrients, suspended solids and some elemental components e.g. aluminium in the case of water treatment facilities.

9.2.1 Conclusion

Pressures resulting from aquaculture activities are primarily disturbance to sediments as a consequence of compaction of sediment along access routes and preparation of sites and harvest of clam sites. It was, therefore, concluded that given the pressure resulting from point discharge location such as the urban waste-water treatment and/or combined sewer outfalls would likely impact on physico-chemical parameters in the water column, any **in-combination effects with aquaculture activities are considered to be minimal.**

10 SAC AQUACULTURE CONCLUDING STATEMENT

10.1 ASSESSMENT REPORT CONCLUDING STATEMENT

Proposed aquaculture activities occurring in the Ballyness Bay SAC focus on the cultivation of oysters (using bags and trestles) and clams using trays and netting, in the intertidal zone. Based upon this and the information provided in the aquaculture profiling report (**Section 5**), the likely interaction between these culture methodologies and conservation features (habitats and species) of the SAC were considered.

10.1.1 Habitats

An initial screening exercise resulted in the following habitat features and species being excluded from further consideration by virtue of the fact that no spatial overlap of the culture activities was expected to occur; Embryonic shifting dunes [2110], Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120], Humid dune slacks [2190] and *Vertigo geyeri* (Geyer's Whorl Snail) [1013]. Furthermore, none of the proposed aquaculture applications overlap with the Annex I habitat Estuaries [1130] and this was also excluded from further analysis.

A full assessment was carried out on the likely interactions between proposed culture operations and the feature Annex 1 habitat 1140 Mudflats and sandflats not covered by seawater at low tide. The likely effects of the aquaculture activities (species, structures, access routes) were considered in light of the sensitivity of constituent habitats and species of the Annex 1 habitat 1140. Annex I 1140 constituent communities considered include Coarse sediment to sandy mud with oligochaetes and polychaetes community complex and Mobile sand community complex.

Based upon the scale of spatial overlap of proposed intertidal aquaculture activities (including access route activity) and the relatively high tolerance levels of the habitats and associated species, the general conclusion is that proposed intertidal culture activities are non-disturbing to the Qualifying Interests 1130 and 1140 and their constituent community types.

However, the overlap of access routes with the habitat - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] does appear to present a risk of erosion and habitat degradation.

10.1.2 Species

The likely interactions between the proposed aquaculture activities and the following Annex II Species were assessed; Grey seal *Halichoerus grypus* [1364] and Otter (*Lutra lutra* [1355]). The wider objectives for these species focus upon maintaining the good conservation status of populations. The main aspect of the culture activities that could potentially impact the designated species disturbance caused to otter and seal by movements and activities at the sites. Given the locations and timings of the proposed activities (i.e. daytime) it is concluded that activities would be non-disturbing to otter but the risk posed to seal species cannot be entirely discounted.

10.1.3 Recommendations

Notwithstanding the conclusions noted above in relation to Annex 1 habitat 1140, it should be noted that the nature of the community type, Mobile sand community complex is such that there are likely to be locations where the sediments are extremely mobile (and soft) thus making them unsuitable for

aquaculture operations. It is recommended, prior to making a decision to licence, that these areas be clearly identified with the Bay.

The report highlights risks to coastal habitat [2130] features if the activities proposed are licenced in full. More specifically, the risk arises from the additional traffic likely to occur on existing tracks as a result of the need to access the sites. It is recommended that that the views those with specific engineering expertise be sought in order to identify erosion prevention measures that might be put in place to mitigate the risks identified. Alternatively, the re-routing of access routes to avoid overlap with habitat feature 2130 might be considered?

In relation to interactions between aquaculture operations and seal use of the site, the risk of disturbance cannot be discounted. It is important to note that the site, to date, has had very little aquaculture operations and therefore, the seals will have little opportunity to habituate to the activities. Also of note, where there is no specific barrier to access (e.g. tidal channel), the seals are more likely to be disturbed. Based upon local observations it appears that the seals are faithful to this one identified haul out location. Therefore, careful consideration should be given to licencing the site which shares the sandbank with the observed seal haul out.

11 REFERENCES

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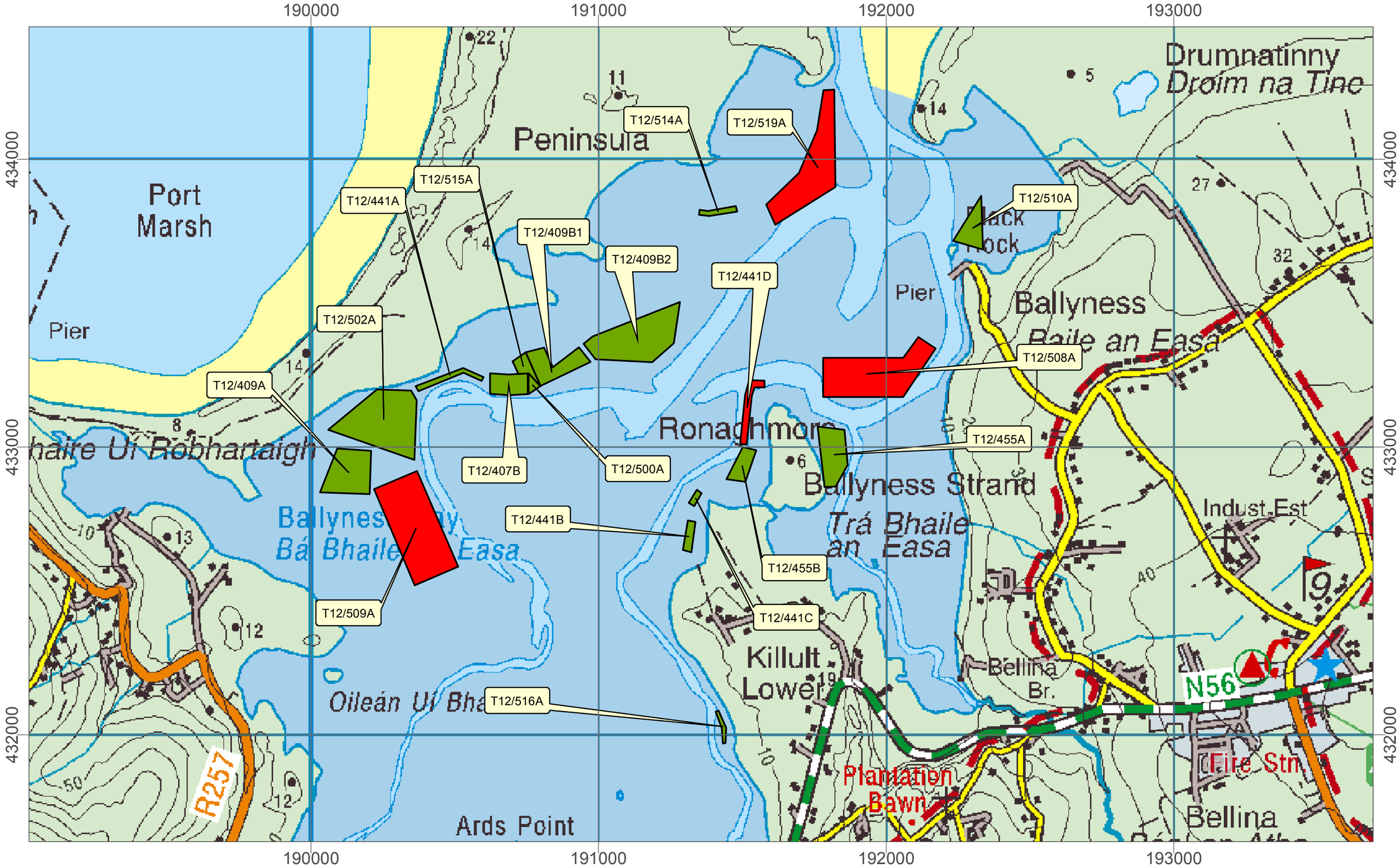

BALLYNESS BAY, CO. DONEGAL.
AQUACULTURE SITES

Drawn : 03-12-2019

Scale = 1:12,000

An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture, Food and the Marine

AN tACHT IASCAIGH (LEASÚ), 1997 (UIMH. 23) AGUS An tACHT IMEALL TRÁGHA, 1933 (UIMH. 12) FÓGRA AR CHINNTÍ A BHAINEANN LE CEADÚNAIS DOBHARSHAOTHRAITHE AGUS IMEALL TRÁ

Tá cinntí déanta ag an Aire Talmhaíochta, Bia agus Mara maidir leis na hiarratais ar Cheadúnais Dobharshaothraithe agus Imeall Trá atá leagtha amach sa tábla thíos, maidir le láithreán i mBá Bhaile an Easa, Co Dhún na nGall:-

Uimh. Thag. Láithreáin	Na hIarratasóirí	Speiceas & Modh	Cinneadh an Aire
T12/407B	Joseph Coll, Mullach an Chnoic, Mín Lárach, Gort an Choirce, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/409A	Edward agus Paul O'Brien, Machaire Uí Rabhartaigh, Gort an Choirce, Co Dhún na nGall	Breallaigh ar thráidirí adhmaid faoi líontáin	Ceadúnas Athraithe a Dheonú
T12/409B	Edward agus Paul O'Brien, Machaire Uí Rabhartaigh, Gort an Choirce, Co Dhún na nGall	Breallaigh ar thráidirí adhmaid faoi líontáin agus Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas Athraithe a Dheonú
T12/441A	Anthony McCafferty, Glaise Chú, Gort an Choirce, Co Dhún na nGall.	Breallaigh ar thráidirí adhmaid faoi líontáin agus Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/441B	Anthony McCafferty, Glaise Chú, Gort an Choirce, Co Dhún na nGall.	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/441C	Anthony McCafferty, Glaise Chú, Gort an Choirce, Co Dhún na nGall.	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/441D	Anthony McCafferty, Glaise Chú, Gort an Choirce, Co Dhún na nGall.	Breallaigh ar thráidirí adhmaid faoi líontáin agus Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Diúltú Ceadúnas a Dheonú
T12/455A	Seamus O'Donnell, Baile Conaill, An Fál Carrach, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas Athraithe a Dheonú
T12/455B	Seamus O'Donnell, Baile Conaill, An Fál Carrach, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas Athraithe a Dheonú
T12/500A	Joseph Coll, Mullach an Chnoic, Mín Lárach, Gort an Choirce, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/502A	Joseph Coll, Mullach an Chnoic, Mín Lárach, Gort an Choirce, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas Athraithe a Dheonú
T12/508A	Northern Shores Shellfish Ltd, Árasán 169, Gort na Coiribe, Co na Gaillimhe	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Diúltú Ceadúnas a Dheonú
T12/509A	Northern Shores Shellfish Ltd, Árasán 169, Gort na Coiribe, Co na Gaillimhe	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Diúltú Ceadúnas a Dheonú
T12/510A	Tullyshellfish Ltd, Tullyally, Carraig Mhic Uidhilín, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/514A	Joseph Coll, Mullach an Chnoic, Mín Lárach, Gort an Choirce, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/515A	Joseph Coll, Mullach an Chnoic, Mín Lárach, Gort an Choirce, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/516A	Joseph Coll, Mullach an Chnoic, Mín Lárach, Gort an Choirce, Co Dhún na nGall	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Ceadúnas a Dheonú
T12/519A	Northern Shores Shellfish Ltd, Árasán 169, Gort na Coiribe, Co na Gaillimhe	Oisrí an Aigéin Chiúin ag úsáid málaí agus tristéil	Diúltú Ceadúnas a Dheonú

Tá níos mó sonraí ar cad iad na cúiseanna leis na cinntí seo ar fáil ar shuíomh gréasáin na Roinne ag: http://www.agriculture.gov.ie/seafood/aquaculturefore shoremanagement/aquaculturelicensing/aquaculturelicencedecisions/donegal

Is féidir achomharc i gcoinne chinneadh an Cheadúnais Dobharshaothraithe a dhéanamh i scríbhinn, laistigh de mhí ón dáta a foilsítear é, chuig AN BORD ACHOMHAIRC UM CHEADÚNAIS DOBHARSHAOTHRAITHE, Cúirt Choill Mhinsí, Port Laoise, Co Laoise, ach an Fhoirm Iarratais um Fhógra Achomhairc atá ar fáil ón mBord a líonadh trí ghlaoch a chur ar 057 86 31912, ríomhphost a chur chuig info@alab.ie nó ar an an láithreán gréasáin ag http://www.alab.ie/

Féadfar do dhuine bailíocht an chinneadh i ndáil le Ceadúnas Imeall Trá a cheistiú trí iarratas a dhéanamh ar mhodh iarratais ar athbhreithniú breithiúnach, faoi Ordú 84 de Rialacha na nUaschúirteanna (IR Uimh. 15 de 1986). Is féidir faisnéis phraiticiúil faoin meicníocht athbhreithnithe a fháil ón mBord um Fhaisnéis do Shaoránaigh ag: http://www.citizensinformation.ie/

FISHERIES (AMENDMENT) ACT, 1997 (NO. 23) AND FORESHORE ACT, 1933 (NO. 12) NOTICE OF DECISIONS IN RELATION TO AQUACULTURE AND FORESHORE LICENCES

The Minister for Agriculture, Food and the Marine has made determinations on the Aquaculture and Foreshore Licence applications as set out in the table below in Ballyness Bay, Co Donegal:

Site Ref No	Applicants	Species & Method	Minister's Decision
T12/407B	Joseph Coll, Hillcrest, Meenlaragh, Gortahork, Co Donegal	Pacific Oysters using bags and trestles	Grant Licence
T12/409A	Edward and Paul O'Brien, Magheraroarty, Gortahork, Co Donegal	Clams on wooden trays under mesh	Grant Variation Licence
T12/409B	Edward and Paul O'Brien, Magheraroarty, Gortahork, Co Donegal	Clams on wooden trays under mesh and Pacific Oysters using bags and trestles	Grant Variation Licence
T12/441A	Anthony McCafferty, Glasserchoo, Gortahork, Co Donegal.	Clams on wooden trays under mesh and Pacific Oysters using bags and trestles	Grant Licence
T12/441B	Anthony McCafferty, Glasserchoo, Gortahork, Co Donegal	Pacific Oysters using bags and trestles	Grant Licence
T12/441C	Anthony McCafferty, Glasserchoo, Gortahork, Co Donegal	Pacific Oysters using bags and trestles	Grant Licence
T12/441D	Anthony McCafferty, Glasserchoo, Gortahork, Co Donegal	Clams on wooden trays under mesh and Pacific Oysters using bags and trestles	Refuse to Grant Licence
T12/455A	Seamus O'Donnell, Ballyconnell, Falcarragh, Co Donegal	Pacific Oysters using bags and trestles	Grant Variation Licence
T12/455B	Seamus O'Donnell, Ballyconnell, Falcarragh, Co Donegal	Pacific Oysters using bags and trestles	Grant Variation Licence
T12/500A	Joseph Coll, Hillcrest, Meenlaragh, Gortahork, Co Donegal	Pacific Oysters using bags and trestles	Grant Licence
T12/502A	Joseph Coll, Hillcrest, Meenlaragh, Gortahork, Co Donegal	Pacific Oysters using bags and trestles	Grant Variation Licence
T12/508A	Northern Shores Shellfish Ltd, Apt. 169, Gort Na Coiribe, Co Galway	Pacific Oysters using bags and trestles	Refuse to Grant Licence
T12/509A	Northern Shores Shellfish Ltd, Apt. 169, Gort Na Coiribe, Co Galway	Pacific Oysters using bags and trestles	Refuse to Grant Licence
T12/510A	Tullyshellfish Ltd, Tullyally, Redcastle, Co Donegal	Pacific Oysters using bags and trestles	Grant Licence
T12/514A	Joseph Coll, Hillcrest, Meenlaragh, Gortahork, Co Donegal	Pacific Oysters using bags and trestles	Grant Licence
T12/515A	Joseph Coll, Hillcrest, Meenlaragh, Gortahork, Co Donegal	Pacific Oysters using bags and trestles	Grant Licence
T12/516A	Joseph Coll, Hillcrest, Meenlaragh, Gortahork, Co Donegal	Pacific Oysters using bags and trestles	Grant Licence
T12/519A	Northern Shores Shellfish Ltd, Apt. 169, Gort Na Coiribe, Co Galway	Pacific Oysters using bags and trestles	Refuse to Grant Licence

The reasons for these decisions are elaborated on the Department's website at: http://www.agriculture.gov.ie/seafood/aquaculturefore shoremanagement/aquaculturelicensing/aquaculturelicencedecisions/donegal

An appeal against the Aquaculture Licence decision may be made in writing, within one month of the date of its publication, to THE AQUACULTURE LICENCES APPEALS BOARD, Kilminchy Court, Portlaoise, Co Laois, by completing the Notice of Appeal Application Form available from the Board, phone 057 86 31912, e-mail info@alab.ie or website at http://www.alab.ie/

A person may question the validity of the Foreshore Licence determination by way of an application for judicial review, under Order 84 of the Rules of the Superior Court (SI No. 15 of 1986). Practical information on the review mechanism can be obtained from the Citizens Information Board at: http://www.citizensinformation.ie/

An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

COPY

Ref: T12/[redacted] 441B, [redacted]

Anthony McCafferty,
Glasserchoo,
Gortahork,
Co. Donegal.

sent by registered post

FISHERIES (AMENDMENT) ACT, 1997 (NO.23)
NOTICE OF MINISTERIAL DECISION TO GRANT/REFUSE AQUACULTURE LICENCES AND FORESHORE LICENCES.

Dear Mr McCafferty,

I would like to inform you of the Minister for Agriculture, Food and the Marine Decision on the following aquaculture and accompanying Foreshore Licence applications (see attached information notes and draft aquaculture licences):-

Site Reference Number	Ministerial Decision	Species & Method	Licence Term
[redacted]			
T12/441B	Grant Licence	Pacific Oysters using bags and trestles	10 year
[redacted]			

I enclose an extract from the public notice of the decision which **the Department** has arranged to have published in "Donegal Democrat".

Any person aggrieved by the decision may, in accordance with Section 41 of the Fisheries (Amendment) Act 1997, appeal against it in writing to the Aquaculture Licences Appeals Board. This appeal must be lodged within one month beginning on the date of the publication of the decision.

In addition, a person may question the validity of the Foreshore Licence determination by way of an application for judicial review, under Order 84 of the Rules of the Superior Court (SI No. 15 of 1986). Practical information on the review mechanism can be obtained from the Citizens Information Board at: http://www.citizensinformation.ie/

The Licences will be issued to you as soon as possible after the end of the period of one month from the date of publication of the notice in "Donegal Democrat", if there is no appeal.

Please also find enclosed the conditions that will apply to any Aquaculture Licence that may be issued by the Minister.

Yours sincerely

Aquaculture and Foreshore Management Division
26th November 2019

S.12 (3) OF THE FISHERIES (AMENDMENT) ACT, 1997(NO.23)
INFORMATION NOTE TO APPLICANT FOR THE PURPOSE OF REGULATION 18 OF THE AQUACULTURE (LICENCE APPLICATION) REGULATIONS 1998

REFERENCE NO:	**T12/441B**
APPLICANT:	**Anthony McCafferty**
AQUACULTURE TO WHICH DECISION RELATES:	The culture of Pacific Oysters using bags and trestles on the foreshore in Ballyness Bay, Co. Donegal.
NATURE OF DECISION:	Grant of licence
DATE OF DECISION:	**25th November 2019**
CONDITIONS OF LICENCE:	See attached.
DURATION OF LICENCE:	10 years
ISSUE OF LICENCE:	The licence will be dated and issued as soon as practicable after the end of the period of one month from the date of publication of a notice in a newspaper circulating in the vicinity of the aquaculture, if no appeal is made to the Aquaculture Licences Appeals Board within that period, under Section 40 and 41 if the Fisheries (Amendment) Act, 1997.

Note: It has been decided to grant the applicant a separate Foreshore Licence under the Foreshore Act, 1933 (No.12), contemporaneous with the Aquaculture Licence, subject to standard conditions applicable to Foreshore Licences.

FISHERIES (AMENDMENT) ACT, 1997 (NO. 23) AND FORESHORE ACT, 1933 (NO. 12)
NOTICE OF DECISIONS IN RELATION TO AQUACULTURE AND FORESHORE LICENCES

The Minister for Agriculture, Food and the Marine has made determinations on the following Aquaculture and Foreshore Licence applications:-

Site Ref No	Applicants	Species & Method	Minister's Decisions
[redacted]			
T12/441B	Anthony McCafferty, Glasserchoo, Gortahork, Co. Donegal	Pacific Oysters using bags and trestles	Grant Licence
[redacted]			

The reasons for this decision are elaborated on the Department's website at: http://www.agriculture.gov.ie/seafood/aquaculturefore shoremanagement/aquaculturelicensing/aquaculturelicencedecisions/donegal

An appeal against the Aquaculture Licence decision may be made in writing, within one month of the date of its publication, to THE AQUACULTURE LICENCES APPEALS BOARD, Kilminchy Court, Portlaoise, Co. Laois, by completing the Notice of Appeal Application Form available from the Board, phone 057 86 31912, e-mail info@alab.ie or website at http://www.alab.ie/

A person may question the validity of the Foreshore Licence determination by way of an application for judicial review, under Order 84 of the Rules of the Superior Court (SI No. 15 of 1986). Practical information on the review mechanism can be obtained from the Citizens Information Board at: http://www.citizensinformation.ie/

Submission AGR 00689-19: Recommendation to Grant Aquaculture and Foreshore Licences for [redacted] sites (T12/441)

TO:	Minister	AUTHOR:	OMahony, Jane
STATUS:	Completed	OWNER:	OMahony, Jane
PURPOSE:	For Decision	REVIEWERS:	Farrell, Geraldine OCallaghan, Grace Quinlan, John Beamish, Cecil Smith, Ann
DIVISION:	Coastal Zone Management		
DECISION BY:			

Final comment

Minister determines the Aquaculture and Foreshore Licences sought be granted for the reasons outlined.

Action required

Ministerial Determination on Aquaculture/Foreshore Licensing Application (T12/441)

Executive summary

The Minister's determination is requested in relation to an application for Aquaculture Licences from Anthony McCafferty, Glasscheroo, Gortahork, Co. Donegal. The application is for the culture of Pacific Oysters on two sites and Pacific Oysters and Clams on two sites, totalling 1.529ha on the foreshore in Ballyness Bay, Co. Donegal.

This submission covers [redacted] sites only ([redacted], T12/441B & [redacted] the fina[redacted]

It is recommended that the Minister determines the Aquaculture and Foreshore Licences sought **be granted** to Anthony McCafferty for the reasons outlined in the 'Detailed Information' section below.

Detailed information

DECISION SOUGHT

The Minister's determination is requested in relation to an application for Aquaculture Licences from Anthony McCafferty, Glasscheroo, Gortahork, Co. Donegal. The sites are for the cultivation [redacted], Pacific Oysters using bags and trestles on Site T12/441B totalling 0.408 ha, [redacted] on the foreshore in Ballyness Bay, Co Donegal.

A submission in respect of the application for the Foreshore Licences is also set out for the Minister's consideration.

Note: Tabs attached to this submission may contain additional information which is subject to redaction if transmitted to third parties.

BACKGROUND

Marine aquaculture operations require separate Aquaculture and Foreshore Licences and Ministerial approval is requested in respect of this submission (Aquaculture Submission) and the submission underneath (Foreshore Submission), which refer to the same site.

The Aquaculture Licence defines the activity that is permitted on a particular site and the Foreshore Licence allows for the occupation of that particular area of foreshore. The continuing validity of each licence is contingent on the other licence remaining in force.

APPLICATION FOR AN AQUACULTURE LICENCE

An application (**TAB A**) for Aquaculture Licences has been received from the applicant referred to above (in conjunction with an application for a Foreshore Licence per site), for the cultivation of [redacted], Pacific Oysters using bags and trestles on Site T12/441B totalling 0.408 ha [redacted] on the foreshore in Ballyness Bay, Co. Donegal (see **TAB A**).

LEGISLATION

Section 7 of the Fisheries (Amendment) Act 1997 provides that the licensing authority (i.e. Minister, delegated officer or, on appeal, the Aquaculture Licences Appeals Board) may, if satisfied that it is in the public interest to do so, licence a person to engage in aquaculture.

Article 6 (3) of the Habitats Directive provides that *"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon … shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives … the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned …"*

CONSULTATION AND PUBLIC COMMENT

The application was sent to the Department's technical experts, statutory consultees and was also publicly advertised in a composite public notice covering both aquaculture and foreshore elements.

Technical Consultation – TAB B

Marine Engineering Division (MED): MED have stated these sites while may be of poor quality following site surveys there is no compelling reasons to refuse or modify them. Sites T12/441B and [redacted] are positioned in the low water channel of Gleanna River and adjoining mobile sand area – [redacted]

Marine Survey Office: No objections to the application from a navigational viewpoint. Should a licence be granted the MSO provided information on required markers for the site that would require sanction from CIL and installation prior to commencement of operations.

It is also proposed to insert a specific condition covering MSO matters in any licence/s which may issue as follows:

The Minister's determination in respect of this licence is conditional upon immediate full compliance by the Licensee in respect of all requirements and conditions which are imposed under the relevant legal provisions applicable to the Marine Survey Office.

Sea Fisheries Protection Authority: SFPA have an objection to granting of a licence. They note that Ballyness Bay is currently not classified for oyster production. The applicant would need to contact the SFPA prior to operations if a licence was granted to set up a classification program.

Statutory Consultation – TAB C

Regulation 10 of the Aquaculture (Licence Application) Regulations, 1998 requires certain statutory bodies to be notified of an Aquaculture Licence application.

Comments were received from the following statutory bodies:

The Department of Culture, Heritage and Gaeltacht Affairs (DCHG): Provided observations for consideration concerning the proposed licensing of aquaculture activities in Ballyness Bay. These issues are addressed in the Licensing Authority's Conclusion Statement for aquaculture activities in Ballyness Bay SAC (Site Code: 01090) – see Conclusion Statement **(TAB D)**.

Marine Institute: The MI had no objection to this application. They noted that the sites are is not located in a designated Shellfish Growing Waters area and shellfish in the bay are currently not classified under Annex II of EU Regulation 854/2004. The MI also noted that the site is located within the Ballyness Bay SAC and the findings of the AA report and the Licensing Authority's Conclusion Statement. They recommended that the licensee is required to prepare a Contingency Plan which should identify, inter alia, methods for the removal from the environment of any non-target species introduced as a result of operation at this site. They also recommended that the source of seed must be approved by the Department, triploid seed only is used and the access route over the intertidal habitat must be strictly adhered to, in order to minimise habitat disturbance. The MI noted that the CLAMS process might be useful and appropriate vehicle for the development and implementation of alien species management and control plans. These concerns can be dealt with by way of licence conditions to this effect (**schedule 4**).

Following considerations implicit to Sections 61 (*e* and *f*) of the Fisheries (Amendment) Act 1997, the Marine Institute is of the view that there will be no significant impacts on the marine environment and that the quality status of the area will not be adversely impacted.

Commissioner of Irish Lights: CIL has no objection to this application. However if granted, structures must be clearly marked and the applicant must secure Statutory Sanction from CIL for the aids to navigation that may be required by the MSO (draft licence **schedule 3**).

Donegal County Council: Donegal County Council considers that the proposed aquaculture activity would not constitute a visual intrusion into the scenery of the Bay and is acceptable subject to the locations with licensed activity being clearly marked.

BIM: No objections to the application and stated that they are satisfied that the proposed operation does not conflict with any other aquaculture or inshore fisheries interest in the area.

An Taisce: raised a number of issues regarding traffic disturbance, the designation of the area for grey seals and the mobile sand community within the Bay. These issues are addressed in the Licensing Authority's Conclusion Statement for aquaculture activities in Ballyness Bay SAC (Site Code: 01090) – see Conclusion Statement **(TAB D)**.

Public Consultation

The application was publicly advertised using a composite public notice covering both aquaculture and foreshore elements, in Donegal Democrat on 14th March, 2019. The application and supporting documentation were available for inspection at Letterkenny and Falcarragh Garda Stations for a period of 4 weeks from the date of publication of the notice in the newspaper.

There were no objections/comments received from the public consultation process.

A copy of all the observations/submissions received at the Public/Statutory consultation stage was forwarded to the applicant.

CRITERIA IN MAKING LICENSING DECISIONS

The licensing authority, in considering an application, is required by statute to take account of, as appropriate, the following points and must also be satisfied that it is in the public interest to license a person to engage in aquaculture:

a) the suitability of the place or waters

There were no objections to the proposal from a technical perspective. Prior to commencement of aquaculture activities at the site a classification must be assigned to the water and a biotoxin monitoring programme must be received by the SFPA.

b) other beneficial uses of the waters concerned

Public access to recreational and other activities can be accommodated by this project;

c) the particular statutory status of the waters

(i) Natura 2000

The site is located within the Ballyness Bay SAC. An Article 6 Appropriate Assessment has been carried out in relation to aquaculture activities in this SAC. This Assessment and its findings were examined by the Department and its scientific/technical advisors. This led to the Licensing Authority (i.e. the Minister) producing a Conclusion Statement outlining how it is proposed to licence and manage aquaculture activities in the above Natura site in compliance with the EU Habitats Directives.

(ii) Shellfish Waters

The site is not located within Shellfish Designated Waters. The Shellfish Waters Directive – 2006/113/EC - was designed to put in place concrete measures to protect shellfish waters, against pollution and to safeguard certain shellfish populations from various harmful consequences, resulting from the discharge of pollutant substances into the sea. Neither Aquaculture nor Shellfish Waters legislation precludes the licensing of aquaculture in non-designated areas. The original designations were based on active sites rather than proposed areas. The Minister when making a decision must take account of the suitability of the waters with full consideration of the views of all the stakeholders including Local Authorities as Statutory Consultees.

(iii) Shellfish Classification

Microbiological classification of shellfish areas is a requirement of European food law – areas are classified using the amount of bacteria found in sampled shellfish, as an index of water quality. From a food safety point of view, there is no problem in classifying

an area that is not a designated Shellfish Waters area, as the classification programme is a requirement under hygiene legislation, whereas shellfish designated waters areas relate to pollution control programmes. Once licensed the licenceholder must contact the local Sea Fisheries Protection Authority (SFPA) office to organise a classification and biotoxin monitoring programme for the site and all requirements of the SFPA must be complied with including the need to have classification assigned prior to commencing operations, as per licence conditions listed in the draft licence (schedule 4).

d) the likely effects on the economy of the area

Aquaculture has the potential to provide a range of benefits to the local community, such as attraction of investment capital, development of support services, etc.

e) the likely ecological effects on wild fisheries, natural habitats, flora and fauna

No significant issues arose regarding wild fisheries. The potential ecological impacts of aquaculture activities on natural habitats, flora and fauna are addressed in the Article 6 Appropriate Assessment for Ballyness Bay and in the Licensing Authority's Conclusion Statement.

f) the effect on the environment generally

The Department's Scientific Advisors, the Marine Institute, are of the view that there will be no significant impacts on the marine environment and that the quality status of the area will not be adversely impacted.

g) DCHG raised no objection to the development from an underwater archaeological perspective.

RECOMMENDATION

It is recommended that the Minister:

approves the granting of Aquaculture Licences **(TAB E)** to Anthony McCafferty, Glasscheroo, Gortahork, Co. Donegal, for a period of ten (10) years for the purpose of cultivating [redacted] Pacific Oysters using bags and trestles on Site T12/441B and [redacted] in accordance with the terms and conditions of the attached draft Aquaculture Licence. As there are [redacted] sites to be approved in the application, a separate licence will issue in respect of each site.

REASONS FOR DECISION

The Minister for Agriculture, Food and the Marine is required to give public notice of both the licensing determination and the reasons for it. To accommodate this, it is proposed to publish the following on the Department's website, subject to the Minister approving the above recommendation:

"Determination of Aquaculture/ Foreshore Licensing application –T12/441

Anthony McCafferty has applied for authorisation to cultivate [redacted] and Pacific Oysters using bags and trestles on Sites T12/441B (0.408 ha) and [redacted] totalling 0.929 ha on the foreshore in Ballyness Bay, Co. Donegal.

The Minister for Agriculture, Food and the Marine has determined that it is in public interest to grant the licences sought. In making his determination the Minister considered those matters which by virtue of the Fisheries (Amendment) Act 1997, and other relevant legislation, he was required to have regard. Such matters include any submissions and observations received in accordance with the statutory provisions. The following are the reasons and considerations for the Minister's determination to grant the licences sought: -

a. *There were no objections to the proposal from a technical perspective.*
b. *Public access to recreational and other activities can be accommodated by this project;*
c. *The proposed development should have a positive effect on the economy of the local area;*
d. *All issues raised during Public and Statutory consultation phase;*
e. *There are no effects anticipated on the man-made environment heritage of value in the area;*
f. *No significant effects arise regarding wild fisheries;*
g. *The site is located within the Ballyness Bay Special Area of Conservation (an Article 6 Assessment has been carried out in relation to aquaculture activities in the SAC). The Licensing Authority's Conclusion Statement (available on the Department's website) outlines how aquaculture activities in this SAC, including this site, are being licensed and managed so as not to significantly and adversely affect the integrity of the Ballyness Bay SAC.*
h. *Scientific observations related to the Appropriate Assessment received during the licensing consultation process are*

addressed in the Licensing Authority's Appropriate Assessment Conclusion Statement;

i. *Taking account of the recommendations of the Appropriate Assessment the aquaculture activity at this site is consistent with the Conservation Objectives for the SAC;*
j. *No significant impacts on the marine environment and the quality status of the area will not be adversely impacted.*
k. *The updated Aquaculture and Foreshore licences contain terms and conditions which reflect the environmental protection now required under EU and National law."*

Recommendation to grant a Foreshore Licence application (T12/441)

DECISION SOUGHT

The Minister's determination is requested please in relation to the application for Foreshore Licences from Anthony McCafferty, Glasscheroo, Gortahork, Co. Donegal, for 3 sites in Ballyness Bay, Co. Donegal, in which it is proposed to conduct aquaculture.

BACKGROUND

Marine aquaculture operations require separate Aquaculture and Foreshore Licences and Ministerial approval is requested in respect of this submission (Foreshore Submission) and the submission above (Aquaculture Submission), which refer to the same site.

The Foreshore Licence allows for the occupation of the particular area of foreshore while the Aquaculture Licence defines the activity that is permitted in this area. The continuing validity of each licence is contingent on the other licence remaining in force.

APPLICATION FOR A FORESHORE LICENCE

An application (**TAB A**) for Foreshore Licences has been received from the applicant referred to above (in conjunction with an Aquaculture Licence application), relating to the occupation of the foreshore associated with the Aquaculture Licence application which covers four sites totalling 1.529 hectare (numbered [redacted], T12/441B and [redacted].

Site T12/441D on the application form will be dealt with under a separate submission.

LEGISLATION

Section 3 of the Foreshore Act, 1933 gives power to the Minister to licence the use of foreshore, if he is of the opinion that it is in the public interest to do so.

CONSULTATION AND PUBLIC COMMENT

The application was sent to the Department's technical experts, and was also publicly advertised in a composite public notice covering both aquaculture and foreshore elements.

This application was also sent to the Department of Housing, Planning and Local Government (DHPLG) in accordance with subsection (1B) of Section 3 of the Foreshore Act, 1933, which requires consultation between the Minister for Agriculture, Food and the Marine and the Minister for Housing, Planning and Local Government. Whilst aquaculture legislation requires certain statutory bodies to be notified of an aquaculture application, no other statutory bodies are prescribed consultees under Fisheries related foreshore legislation.

DHPLG: There were no comments received from a water quality or foreshore perspective

Technical Consultation – TAB B

Marine Engineering Division (MED): MED have stated these sites while may be of poor quality following site surveys there is no compelling reasons to refuse or modify them. Sites T12/441B and [redacted] are positioned in the low water channel of Gleanna River and adjoining mobile sand area – [redacted].

Marine Survey Office: No objections to the application from a navigational viewpoint. Should a licence be granted the MSO provided information on required markers for the site that would require sanction from CIL and installation prior to commencement of operations.

Sea Fisheries Protection Authority: SFPA have an objection to granting of a licence. They note that Ballyness Bay is currently not classified for oyster production. The applicant would need to contact the SFPA prior to operations if a licence was granted to set up a classification program.

Public Consultation

The application was publicly advertised using a composite public notice covering both aquaculture and foreshore elements, in the

Donegal Democrat on 14th March 2019. The application and supporting documentation were available for inspection at Letterkenny and Falcarragh Garda Stations for a period of 4 weeks from the date of publication of the notice in the newspaper.

There were no objections/comments received from the public consultation process.

CRITERIA IN MAKING LICENSING DECISIONS

The Minister, in considering applications for Foreshore Licences, may, if satisfied that it is in the public interest to do so, grant such licences.

Section 82 of the Fisheries (Amendment) Act, 1997 stipulates that the Minister, in considering an application for licences under the Foreshore Acts, which is sought in connection with the carrying on of aquaculture pursuant to an Aquaculture Licence, shall have regard to any decision of the licensing authority in relation to the Aquaculture Licence.

RECOMMENDATION

It is recommended that the Minister:

approves the granting of Foreshore Licences (**TAB F**) Anthony McCafferty, Glasscheroo, Gortahork, Co. Donegal, for 3 sites in Ballyness Bay for a period of ten (10) years for occupation of the sites for the carrying out of aquaculture activities as defined in the Aquaculture Licences, and in accordance with the terms and conditions of the attached draft Foreshore Licences. AS there are three sites a separate licence will issue for each site.

Related submissions

There are no related submissions.

Comments

Farrell, Geraldine - 08/11/2019 15:52
It is recommended that the Minister approves the granting of the Aquaculture / Foreshore Licences for 3 sites, to Anthony McCafferty for the reasons outlined in the submission above and in accordance with the terms & conditions of the attached draft licence(s).

OCallaghan, Grace - 11/11/2019 13:28
I have reviewed the submission and agree with the recommendation made that the Minister approves the granting of the Aquaculture / Foreshore Licences for 3 sites, to Anthony McCafferty for the reasons outlined in the submission above and in accordance with the terms & conditions of the attached draft licence(s). GOC

Quinlan, John - 13/11/2019 09:18
Recommended for approval please.

Beamish, Cecil - 13/11/2019 10:46
Recommended that the Minister determines the Aquaculture and Foreshore Licences sought be granted to Anthony McCafferty for the reasons outlined in the submission.

Smith, Ann - 13/11/2019 10:58
Approved for submission to Minister. AS 13/11/2019

Lennox, Graham - 25/11/2019 16:07
Minister determines the Aquaculture and Foreshore Licences sought be granted for the reasons outlined.

User details

INVOLVED:	OMahony, Jane Farrell, Geraldine OCallaghan, Grace Quinlan, John Beamish, Cecil Sub Sec Gens Office eSub Sec Gen
READ RECEIPT:	OMahony, Jane Farrell, Geraldine OCallaghan, Grace Quinlan, John Beamish, Cecil Smith, Ann Lennox, Graham

eSub Ministers Office
eSub Minister

SFPA
AN tÚDARÁS UM CHOSAINT IASCAIGH MHARA
SEA FISHERIES PROTECTION AUTHORITY

04/04/2019

Karen Gill
Aquaculture & Foreshore Management Division,
National Seafood Centre,
Clogheen,
Clonakilty,
Co. Cork.

Ref: T12/441 Anthony Mc Cafferty

Dear Karen,

In reference to the aquaculture & foreshore licensing application ref no: T12/441, submitted by Mr. Anthony Mc Cafferty, please find below the findings of the Sea Fisheries Protection Authority:

The SFPA have an objection to granting a license.

Ballyness bay is not a classified bay for oyster or clam production. Mr. Mc Cafferty will have to contact the SFPA with regards to setting up a classification program.

This is a historical application dating to 2011.

Kind Regards,

Lesley Mc Caffrey

Lesley Mc Caffrey
Sea Fisheries Protection Officer.

Sea Fisheries Protection Authority
Fishery Harbour Centre
Killybegs
Co. Donegal
Ireland

T: +353876924142
F: +35374 9731819
E: lesley.mccaffrey@sfpa.ie

Mary Hall

AFMD

Wednesday, 05 October 2011

T12/441

This office has no objection to this application from a navigational viewpoint provided the following conditions are complied with:

The applicant is required to apply to the Commissioners of Irish Lights (Fax: 01 271 5566, email: marine@cil.ie) for sanction to establish the followingmarks: posts, projecting two meters above sea level at highest astronomical tide and with a topmark of a diagonal St.Andrews cross, painted yellow, should be erected at the seaward coners of the development .(total three poles)

An additional pole should be placed on the extreme landward corners of the development(total two poles).

In order for charts and nautical publications to be updated the applicant is required to inform the British Admiralty Hydrographic Office at Taunton , UK, of the location and nature of the site.

(Fax:0044 1823 284077, email : hde@hdc.hydro.gov.uk).

Capt.Neil Forde

Nautical Surveyor

Mr. John Campbell. Divisional Engineer BJC 21/5/12

Ms. Karen Gill. AFMD

RE: T12/411 Aquaculture licence application Anthony McClafferty. Ballyness Bay

Ms Gill's memo of 21 9/11 and attached application form refers.

The sites in question are located on shoreline which is relatively steep in places and which has a substantial gravel and cobble content – it is accessible by tractor but would not be ideal from an access perspective.

Mr. McClafferty's proposed production tonnages for the site are I think too high – it is unlikely that the sites can produce the quantities of oysters and clams proposed because of steepness narrowness of sites.

Small quantities of oysters were grown here some 15 years ago.

It may be appropriate for shellfish production on these sites to be attempted again and the enterprise could hopefully adjust itself to whatever the growing characteristics of the sites prove to be in the initial years

The sites are located in a Natura area (Ballyness Bay SAC) – Input of NPWS and appropriate assement required.

Visual impact is unlikely to be a significant issue.

The seeming overlap by the inter site access route with a licensed site is not a problem as site in question is surrendered. The access route to be used can be worked out in more detail/better specified with applicant in advance of a licence being issued.

Some oysters have been grown on or near these sites more than 10 years ago with only limited success. In fact there were the remains of a small number of abandoned trestles on these and other parts of the Killult Rinaclimore shore at Ballyness Bay sites some years ago the owner of which we were unable to identify with certainty. If the sites were to be licensed we would organise with any licensee to ensure that remains of any old trestles on their site(s) were removed and properly disposed of

The applicant might be asked for one piece of additional information – he proposes to use clam trays at south end of site – where and how does he propose to ongrow the clams after this tray based nursery stage bearing in mind that much of ground applied for is stony and may not be suited to ongrowing under mesh.

Subject to additional information on above question (re' clams) I recommend that the sites as applied for go to advertising.

Paul O'Sullivan

Paul O'Sullivan
21/5/12

Farrell, Geraldine

From: OSullivan, Paul
Sent: 07 March 2019 14:26
To: Farrell, Geraldine
Cc: Campbell, John
Subject: Sites [redacted] and [redacted] Ballyness Bay
Attachments: P1000496.JPG; P1000497.JPG

Geraldine

I have carried out field survey work at low spring tides on sites in Ranaghmore area of Ballyness Bay on 19/2/19 and 21/2/19 in order to look in more detail at the physical suitability of some of the aquaculture sites applied for there. This was prompted by concerns raised about mobile sands in the Bay (raised in AA and which may also come up at consultation stage) and by AFMD confirming recently that [redacted] remained a live application.

Based on these recent Department surveys of substrate type and low water positions, I wish to provide additional recommendations to add on to our earlier reports on application s[redacted] and T12/441 as follows:

[redacted]

[redacted]

[redacted]

I also inspected sites 441B and [redacted] and have some concerns about their position in low water channel of Gleanna River and adjoining mobile sand area – [redacted] but on balance I would say leave the applied for areas go to licensing if they get through the consultation process - the recent surveys suggest 441B and [redacted] are poor quality sites but did not find compelling reasons to recommend they be refused or modified .

Please add these recommendations to the relevant files for later consideration.

Regards

OMahony, Jane

From: Farrell, Geraldine
Sent: 13 February 2019 09:01
To: OMahony, Jane
Subject: FW: Ballyness SAC Draft Conclusion Statement
Attachments: Concl Statement Ballyness Bay SAC MED comments120219.doc

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From: OSullivan, Paul
Sent: 12 February 2019 17:48
To: Farrell, Geraldine
Cc: Campbell, John
Subject: RE: Ballyness SAC Draft Conclusion Statement

Geraldine
Some suggestions are on attached.

My email earlier today regarding access on west side of the Bay is also relevant in terms of maybe modifying one of the recommendations and we need MI to adjudicate on that before publication

[redacted]

[redacted]

[redacted]

Regards
Paul O'Sullivan

From: Farrell, Geraldine
Sent: 08 February 2019 17:04
To: OSullivan, Paul
Cc: OMahony, Jane
Subject: Ballyness SAC Draft Conclusion Statement

Hi Paul,

Attached is a first draft of the Ballyness Conclusion Statement. I'd be extremely grateful if you would look over it and I will as I said in our telephone conversation give you a call on Tuesday to discuss Ballyness in general. We are hoping to go to public and stat before the end of this month.

Regards,

Geraldine

Geraldine Farrell
Higher Executive Officer
Aquaculture and Foreshore Management Division

Department of Agriculture, Food and the Marine
National Seafood Centre, Clonakilty, Co. Cork, P85 TX47
Ionad Náisiúnta Bia Mara, Cloich na Coillte, Co. Chorcaí
www.agriculture.gov.ie | Email: Geraldine.Farrell@agriculture.gov.ie
Tel: +353 23 8859519 (Direct Dial) | Tel: +353 23 8859500 (Switchboard)

An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture, Food and the Marine

Marine Institute
Foras na Mara

Rinville,
Oranmore,
Co. Galway
Tel: 091 387200
Date: 03 April 2019

Jane O'Mahony
Aquaculture and Foreshore Management Division
Department of Agriculture, Food and the Marine
Clogheen,
Clonakilty
Co. Cork.

Advice on Aquaculture Licence Application

Applicant	**Anthony McCaffery**
Application type	**New**
Site Reference No	**T12/441[redacted] B,[redacted]**
Species	**Pacific Oysters (*C. gigas*) using Bags and Trestles at Sites T12/441B [redacted]**
Site Status	**Located within the Ballyness Bay SAC (Site Code 001090)** **Not located within a designated Shellfish Growing Waters Area.**

Dear Jane

This is an application for a new aquaculture licence for the cultivation of pacific oysters (*Crassostrea gigas)* using bags and trestles at Sites T12/441B[redacted] on the foreshore at Ballyness Bay, Co. Donegal The area of foreshore at Site[redacted] the area of foreshore at Site T12/441B is 0.408Ha, the area of foreshore at[redacted]

The sites are not located within a designated Shellfish Growing Waters Area. It is recommended that the implications of licencing sites that are not located within a designated Shellfish Growing Waters Area should be fully considered by DAFM as part of the licence determination process.

Shellfish in Ballyness Bay are not currently classified under Annex II of EU Regulation 854/2004.

The cultivation of shellfish at these sites will produce faeces and pseudofaeces. Any impact will be limited to the area of the sites. The build-up of excess organic matter beyond the footprint of the sites is not considered likely. On the basis of targeted research[1], the impact of intertidal oyster cultivation using bags and trestles on the majority of community types is considered not significant.

No chemicals or hazardous substances will be used during the production process.

Considering the location, nature and scale of the proposed aquaculture activity, and in deference to our remit under the Marine Institute Act, and the considerations implicit to Sections 61(e and f) of the Fisheries (Amendment) Act, 1997 the Marine Institute is of the view that there will be no significant impacts on the marine environment and that the quality status of the area will not be adversely impacted.

Sites T12/441[redacted] B[redacted] are located within the Ballyness Bay SAC (Site Code 001090)

[1] Forde, J., F. O'Beirn, J. O'Carroll, A. Patterson, R. Kennedy. 2015. Impact of intertidal oyster trestle cultivation on the Ecological Status of benthic habitats. Marine Pollution Bulletin 95, 223–233.

We note the findings of the Appropriate Assessment report[2] and the Department's draft Natura conclusion statement[3] in regard to the impacts on the Conservation Objectives within the Ballyness Bay SAC.

In making the final determination with respect to this application it is recommended that DAFM take full account of the conclusions and recommendations of the Appropriate Assessment report and the proposed mitigation measures set out in the Department's Draft Natura Conclusion Statement.

Proposed access routes over protected habitat should be strictly adhered to in order to minimise habitat disturbance and it is recommended that this requirement should be included as a specific condition of any licence that may be granted.

Information on the source of seed for the sites has not been provided and the MI recommends that this information be sought from the applicant prior to any final licence determination being made.

In order to be able to assess and manage the potential risk of the introduction of invasive non-native species the MI recommends that the initial source of seed and other sources which may be used at any point in the future should be approved by the Minister. This approval should be a specific condition of any licence that may issue. It should be noted that the control of alien species is a separate issue to the control of diseases in the context of the current Fish Health legislation.

Notwithstanding the recommendation outlined above, and in the event that an Aquaculture Licence is granted, the movement of stock in and out of the site should follow best practice guidelines as they relate to the risk of introduction of invasive non-native species (e.g. Invasive Species Ireland). In this regard it is recommended that, prior to the commencement of operations at the sites, the applicant be required to draw up a contingency plan, for the approval of DAFM, which shall identify, *inter alia*, methods for the removal from the environment of any invasive non-native species introduced as a result of operations at these sites. If such an event occurs, the contingency plan shall be implemented immediately.

In the event that invasive non-native species are introduced into a site as a result of aquaculture activity the impacts may be bay -wide and thus affect other aquaculture operators in the bay. In this regard, therefore, the Marine Institute considers that the CLAMS process may be a useful and appropriate vehicle for the development and implementation of alien species management and control plans.

The Marine Institute recommends that oyster culture utilise triploid oysters only in order to mitigate the risk of the reproduction of the Pacific oyster in the bay.

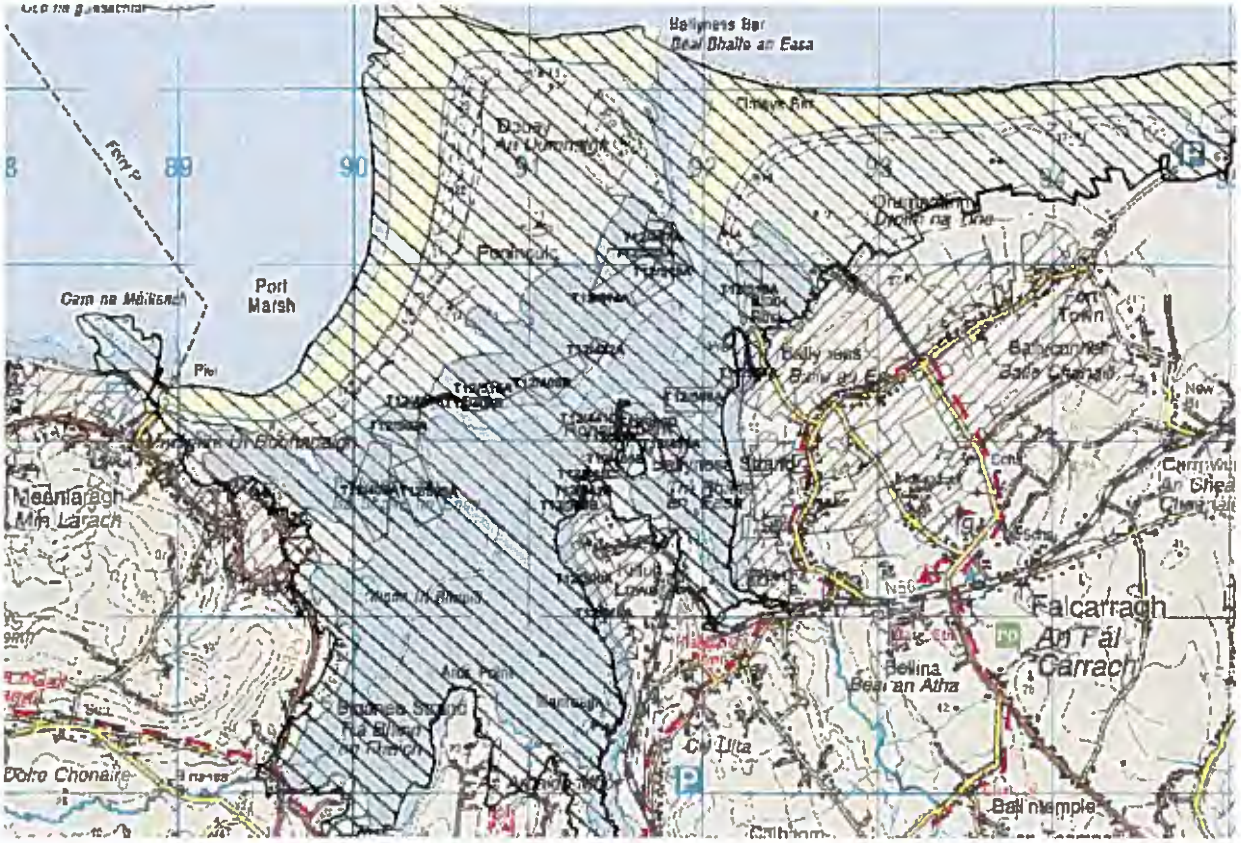
It is statutory requirement that a Fish Health Authorisation as required under Council Directive 2006/88/EC be in place prior to the commencement of the aquaculture activities proposed.

Kind regards,

Dr. Terry McMahon
Section Manager, Marine Environment and Food Safety Services,
The Marine Institute.

2 https://www.agriculture.gov.ie/media/migration/seafood/aquaculture foreshoremanagement/aquaculturelicensing/appropriateassessments/donegal/AppropAssessBallynessBayReport040319.pdf

3 https://www.agriculture.gov.ie/media/migration/seafood/aquaculture foreshoremanagement/aquaculturelicensing/appropriateassessmentconclusionstatement/DraftConclusionStatementBallynessBay070319.pdf



☑ Shellfish Waters Directive Area

☑ Aquaculture Site

☑ Special Area of Conservation

☑ Special Protection Areas

COMMISSIONERS OF IRISH LIGHTS

Harbour Road, Dun Laoghaire, Co. Dublin.

Marine Department

Tel: +353 1 271 5400 E-mail: marine@cil.ie
Fax: +353 1 271 5566 Web: www.cil.ie

Your Reference:

Our Reference:

Date: 2 November 2011

Ms Karen Gill
Aquaculture and Foreshore Management Division
Department of Agriculture, Fisheries and Food
Clogheen
Clonakilty
Co. Cork

Ref: LA0382.0190 (A) & LA0382.0195
T12/441 [redacted] B Clams and Oyster on Trays & Trestles
Applicant: Anthony Mc Cafferty, Glasserchoo, Gortahork, Co. Donegal
Site: Ballyness Harbour, Co. Donegal

Dear Ms Gill,

Thank you for your letter advising us of this application. Based on the information supplied, there appears to be no objection to the development. It is important to ensure that no navigable inter-tidal channels are impeded by any structures.

If a licence is granted, all structures must be clearly marked as required by Regulations and Licensing Permit conditions and to the approval of the Nautical Surveyor with the Marine Survey Office. We would request that you include the following terms in the licence(s) if granted.

- That the applicant(s) secures Statutory Sanction from the Commissioners of Irish Lights for the aids to navigation that may be required by the Marine Survey Office (e.g., posts, projecting two metres above sea level at highest astronomical tide fitted with a top mark of a diagonal St Andrew's Cross painted yellow should be erected at the open corners of the development not on the perimeters of other sites). These aids should be in place before development on the site commences.
- Alternatively and preferably this applicant could together with the licensee of the neighbouring sites [redacted] apply to the MSO to have their sites marked as one site and apply for Statutory Sanction for this unit. *(Note: No Applications for Statutory Sanction for Aids have as yet been received for any of the above sites)*
- The size and specification of aids to navigation should be of the design and specification approved by the Marine Survey Office and must be agreed in advance with the Commissioners of Irish Lights.

It is recommended that local fishing and leisure interests be consulted prior to a decision being made.

Furthermore, if a licence is granted the UK Hydrographic Office at Taunton must be informed of the development's geographical position(s) in order to update nautical charts and other nautical publications.

Yours sincerely,

Desmond O'Brien
***for* Head of Marine**

COASTAL ZONE MANAGEMENT DIVISION
17 NOV 2011
DEPT. OF AGRICULTURE, FISHERIES & FOOD

cc Capt. N. Forde, Dept. of Transport, Marine Survey Office

Comhairle Contae
Dhún na nGall
Donegal County Council

www.ccdhunnangall.ie www.donegalcoco.ie

Email response

04/04/2019

Ms Jane O'Mahony
Department of Agriculture, Food and the Marine
Aquaculture and Foreshore Management Division
National Seafood Centre
Clonakilty
Co. Cork
P85 TX47

Re: Applications for Aquaculture Licences in Ballyness Bay

Dear Jane

I wish to refer to the Aquaculture Licence applications received by this office on the 8th March, 2019 for consultation. I wish to confirm that the planning authority considers that the proposed aquaculture activity and associated oyster bags, trestles and clam mesh will not constitute a visual intrusion into the scenery of the host area and is acceptable subject to the locations of all mesh, tressles & bags associated with the licensed activity being clearly identified by bouys or markers so as not to obstruct other boat users of Ballyness Bay. Please see details of applications below.

Ref. No.	Name	Species & Method	Type of Application
[redacted]			

Cuir freagra chuig: Áras an Chontae, Leifear, Contae Dhún na nGall, Éire F93 Y622
Please reply to: County House, Lifford, Co. Donegal, Ireland F93 Y622

Guthán/Tel: 074 9153900 | Facs/Fax: 074 9172812 | Ríomhphost/Email: info@donegalcoco.ie

Ref. No.	Name	Species & Method	Type of Application
[redacted] T12/441B [redacted]	Anthony McCaffery	Clams under mesh and oysters using bags and trestles [redacted]	New

Yours sincerely

A Melley

Anne Melley
Administrative Officer

An Taisce
The National Trust for Ireland

Department of Agriculture, Food & the Marine,
Aquaculture and Foreshore Management Division,
National Seafood Centre,
Clonakilty,
Co. Cork.

[18/04/2019]

Submission pursuant to the provisions of Article 5 (2) of Directive 2011/92/EU

To Whom It May Concern:

Thank you for referring this notification to An Taisce in accordance with Section 10 of the Aquaculture (Licence Application) Regulations, 1998 (SI No 236 of 1998).

An Taisce has reviewed the applications T12/407, T12/409, T12/441, T12/455, T12/500, T12/502, T12/508, T12/509, T12/510, T12/514, T12/515, T12/516 and T12/519 in Ballyness Bay, County Donegal, and would like to make the following submission in relation to these applications.

1. Traffic disturbance

The increased traffic which would result from licensing of all the aquaculture applications poses a serious risk to fixed coastal dune habitats [2130]:

> *'the licencing of aquaculture activity at this site could lead to additional risk of erosion and degradation of this dune habitat [2130]. The risk of damage from vehicular traffic to dune habitat (2130) in Ballyness Bay therefore, cannot be discounted.'*

The recommendation outlined in the AA report is the following:

> *'It is recommended that the views those with specific engineering expertise be sought in order to identify erosion prevention measures that might be put in place to mitigate the risks identified. Alternatively, the re-routing of access routes to avoid overlap with habitat feature 2130 might be considered?'*

and the AA conclusion statement included this condition:

> *'A licence condition requiring strict adherence to the identified access routes over intertidal and nearshore habitat in order to minimise species/habitat disturbance will be included.'*

but An Taisce would draw the Licensing Authorities attention to this line within the AA report:

> *'the risk arises from the additional traffic likely to occur* ***on existing tracks*** *as a result of the need to access the sites'* [An Taisce emphasis]

As such, An Taisce submit that this condition will be entirely ineffective and does not address the risk posed. The risk arises due to the level of traffic, and has nothing to do with adherence to the existing track. The licensing authority need to be able to conclude beyond reasonable doubt that the QI communities will not be disturbed. , as outlined in the ECJ ruling for C-404/09[1] [Commission v Spain] which held that "*[a]n assessment made under Article 6(3) of the Habitats Directive cannot be regarded as appropriate if it contains gaps and lacks complete, precise and definitive findings and conclusions* ***capable of removing all reasonable scientific doubt*** *as to the effects of the works proposed on the SPA concerned.*" [An Taisce emphasis]

Similarly, the court held in the case of the Commission v Italy that "*assessment must be organised in such a manner that the competent national authorities can be certain that a plan or project will not have adverse effects on the integrity of the site concerned, given that,* ***where doubt remains as to the absence of such effects, the competent authority will have to refuse permission.***" (C304/05[2]. Para 58) [An Taisce emphasis]

Before these sites can be licenced the relevant authority must be certain that there will be no significant impact on the qualifying habitat, and it is obvious from the AA report that the licensing authority do not currently possess the necessary information to reach this conclusion. As such we submit that licencing cannot proceed without contravening Article 6(3) of the Habitats Directive.

The suggestion in the AA report that the opinion of an engineer be sought, or that the traffic be re-routed, while valid, would lead to additional information which would need to then be made available for public scrutiny, by means of an additional public consultation period, prior to proceeding with licensing. To fail to do this would be in contravention of the Aarhus convention by failing to provide for adequate public participation, as required by the Aarhus Convention, which provides for access to information, and public participation in decision-making.

Further, the AA conclusion statement provides this line in the mitigation measures section:

> *'Alternative access routing will also be considered as a mitigation measure.'*

yet despite the clear risk posed by the main proposed access route, the necessity for the alternative route is not actually provided as a binding mitigation measure.

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[1] http://curia.europa.eu/juris/liste.jsf?language=en&num=C-404/09
[2] http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=C-304/05&td=ALL

As such, given that the specifics of the alternative route were not provided as a part of this public consultation, the 'erosion prevention measures' are not detailed, and the necessity of an alternative route is not provided as a binding mitigation measure, it is our considered opinion that the licensing authority cannot proceed with licensing any of the proposed aquaculture applications without contravening both the Habitats Directive and the Aarhus convention.

2. Grey Seals

The introduction of aquaculture into Ballyness Bay poses a serious risk to Grey Seals, as outlined in the AA report:

> *'In relation to interactions between aquaculture operations and seal use of the site, the risk of disturbance* ***cannot be discounted****. It is important to note that the site, to date, has had very little aquaculture operations and therefore, the seals will have little opportunity to habituate to the activities.'*

and:

> *Given that there are currently no aquaculture operations in Ballyness Bay,* ***it is not certain*** *that the introduction of significant levels of aquaculture operations will not impact on the site use by these Annex II species, in particular at those locations proximate to the this haul-out location. Therefore, the risk posed by the proposed aquaculture activities in Ballyness Bay to seal conservation features* ***cannot be discounted****.* [An Taisce emphasis].

An Taisce would direct the licensing authority to the paragraphs above which outline the requirement for certainty under the Habitats Directive, and the removal of doubt before licensing can continue. While we welcome the decision to refuse licensing of site T12-508A, which is closest to the seal haul out area, the risk to the Grey Seals applies to the licensing of all of the aquaculture applications, as outlined above *'it is not certain that...significant levels of aquaculture operations will not impact on the site use by these Annex II species'.*

An Taisce would highlight that while site T12-508A posed the greatest risk, the conclusions reached in the AA document indicate that it is the aquaculture activity in general which poses a risk, and this cannot be discounted. As such, similar to the traffic disturbance, to proceed with licensing while significant levels of uncertainty remain will place the licensing authority in contravention of Article 6(3) of the Habitats Directive.

3. Mobile sand community

The AA report outlines the following:

'The sensitivity of the community type Mobile sand community complex is unknown given the wide variation in species composition and sedimentary characteristics that comprise this community type. In particular, areas where there are very 'soft' mobile sands with impoverished communities would appear to be sensitive to the placement of trestles and even foot traffic among the trestle rows. On this basis, it is assumed that intertidal shellfish culture has the potential to disturb this community type. '

In order to mitigate for this, it is proposed that:

'Mobile sand community complex is such that there are likely to be locations where the ***sediments are extremely mobile*** *(and soft) thus making them unsuitable for aquaculture operations. It is recommended, prior to making a decision to licence, that these areas be clearly identified with the Bay'* [An Taisce emphasis]

and

'Locations where the sediments are extremely mobile (and soft) thus making them unsuitable for aquaculture operations will be excluded from licensing'

However, An Taisce would highlight that these habitats are by definition mobile, and mapping of these will be subjective and unreliable considering the habitats are in constant flux. As such, a large degree of uncertainty remains, and licencing of oyster trestles within a habitat which is constantly in flux puts this community type at risk of disturbance. As such, An Taisce submit that without the necessary degree of certainty of suitability of these sites for supporting oyster trestles, the licencing authority should not proceed with licencing in this Bay.

In conclusion, An Taisce would strongly highlight that due to the risks posed to the Coastal Dune habitats by both vehicular traffic accessing the sites, and the risks posed by aquaculture activity in general to the Grey Seal, and in light of the binding mitigation measures provided, the risks posed cannot be discounted based on the data provided, and it is our considered opinion that the licensing authority cannot legally proceed with the licensing of these sites. Recent ECJ rulings on this clearly underpin the need for the removal of doubt. In addition, it would appear to An Taisce that many of the sites may fall foul of the mobile shifting sands, which are unsuitable for trestle placement. Based on this data, An Taisce submit that no licences should be granted in Ballyness Bay based on the data provided in the AA report. If licensing of these sites should proceed, further information should first be sought, and provided in an additional public consultation period.

We should be grateful if you would take account of these concerns in considering this application. If approved, An Taisce maintains the right to appeal this application should we be dissatisfied with the approval and/or any conditions attached.

We should be grateful if you would provide to us in due course: an acknowledgement of this submission; the nature of the decision; the date of the decision; in the case of a decision to grant an approval, any conditions attached thereto, and the main reasons and considerations on which the decision is based; and, where conditions are imposed in relation to any grant of approval, the main reasons for the imposition of any such conditions.

Is mise le meas,

Elaine McGoff,
Natural Environment Office, An Taisce – The National Trust for Ireland.

OMahony, Jane

From: Murphy, Mike [murphym@bim.ie]
Sent: 18 April 2019 17:43
To: OMahony, Jane
Subject: RE: Consultation Request for Aquaculture/Foreshore Licence applications in Ballyness Bay, Co. Donegal

Dear Jane,
Re: Licence Applications in Ballyness Bay, Co. Donegal, T12/407B; T12/409A and B; T12/441A,B,C,D; T12/455A and B; T12/500A; T12/502A; T12/508A; T12/509A; T12/510A; T12/514A; T12/515A; T12516A; T12/519A, to grow pacific oysters in bags on trestles and in some cases Clams under mesh.
Following internal consultation within the Seafood Technical Services Business Unit, BIM, which includes aquaculture and inshore fisheries, BIM are satisfied that the proposed operations do not conflict with any other aquaculture or inshore fisheries interests in the area.
We have no objection to the applications.
Regards
Mike Murphy

Michael Murphy

Resource Development Manager North,
Seafood Technical Services Business Unit,
BIM

T +353 7479732601
M +353 87 2476448
E mike.murphy@bim.ie

From: OMahony, Jane
Sent: Friday 8 March 2019 15:12
To: 'mary.larkin@fisheriesireland.ie' ; 'terry.mcmahon@marine.ie' ; Dallaghan, Ben ; O'Carroll, Terence ; Murphy, Mike ; 'planning@failteireland.ie' ; 'foreshore@housing.gov.ie' ; 'fem.dau@ahg.gov.ie' ; 'fem.dau@chg.gov.ie' ; 'naturalenvironment@antaisce.org' ; 'Planning@donegalcoco.ie' ; 'Cathal.sweeney@donegalcoco.ie' ; 'foh@udaras.ie'
Subject: Consultation Request for Aquaculture/Foreshore Licence applications in Ballyness Bay, Co. Donegal
Dear All,
Please see letter attached (above) for your attention and also attached live link(below) to relevant application details and documentation .
http://www.agriculture.gov.ie/seafood/aquaculturelicensingmanagement/aquaculturelicenceapplications/foreshorelicenceapplications/donegal/
Kind Regards,

Jane O'Mahony
Aquaculture and Foreshore Management Division

An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture, Food and the Marine
An Lárionad Bia Mara Náisiúnta, An Cloichín, Cloich na Coillte, Corcaigh, P85 TX47
National Seafood Centre, Clogheen, Clonakilty, Co. Cork, P85 TX47

T: +353 (023) 885 9577
www.agriculture.gov.ie

Department of Agriculture, Food and the Marine

OMahony, Jane

From: Foreshore EPA Marine [fem.dau@chg.gov.ie]
Sent: 17 April 2019 13:02
To: Aquaculturelicensing
Subject: T12/407B + 17 for Ballyness Bay, Co. Donegal

RE: T12/407B + 17 for Ballyness Bay, Co. Donegal

A chara,

Please find the nature conservation recommendations of the Department of Culture, Heritage, and the Gaeltacht for the above mentioned licence application.

Nature Conservation

This is the first time the Department of Culture, Heritage and the Gaeltacht has issued comments on the Appropriate Assessment Report and draft Conclusion Statement for Ballyness Bay SAC (site code: 001090).

The Department welcomes the opportunity to provide observations concerning these documents and the aquaculture licence applications for the sites (T12/407B + 17 others) received on the 8th of March 2019. It is hoped that these observations will be considered by the Department of Agriculture, Food and the Marine in its decision-making process.
Fixed coastal dunes with herbaceous vegetation [2130] is an Annex I priority habitat. This Department recommends that access routes should avoid this habitat.

The Appropriate Assessment screens out a number of SPAs on the basis of no spatial overlap. However the following SPAs - Falcarragh to Meenlaragh SPA (site code 004149), Inishbofin, Inishdooey and Inishbeg SPA (site code 004083) and Horn Head to Fanad Head SPA (site code 004194) lie within the 15km zone of impact (DEHLG, 2010) of Ballyness Bay. No rationale is given as to how or why potential detrimental interactions between the conservation features of these SPAs and aquaculture activities within Ballyness Bay were ruled out. It is therefore recommended that a more thorough and complete consideration of theses SPAs and their conservation features be documented in order to complete this appropriate assessment process.

Mise le meas,

Connor Rooney
Executive Officer

—

An Roinn Cultúir, Oidhreachta agus Gaeltachta
Department of Culture, Heritage and the Gaeltacht

Aonad na nIarratas ar Fhorbairt
Development Applications Unit

Bóthar an Bhaile Nua, Loch Garman, Contae Loch Garman, Y35 AP90
Newtown Road, Wexford, County Wexford, Y35 AP90

—

T +353 (0)53 911 7464

manager.dau@chg.gov.ie
www.chg.gov.ie

—

OMahony, Jane

From: OSullivan, Paul
Sent: 07 May 2019 10:46
To: OMahony, Jane
Cc: Campbell, John
Subject: RE: An Tasice & DCHG response re Ballyness Bay Applications

Jane
My comments on the two letters received by AFMD are as follows:

Dept of Culture , Heritage and the Gaeltacht – I think the point raised regarding SPAs within 15km of Ballyness Bay is best addressed by Marine institute as they would have considered this matter in the AA.

An Taisce
1.Traffic Disturbance ; concern on this issue was anticipated in AA and conclusion statement. It is true that the particular standard condition about adhering to access routes would not fit well with the specific concerns raised about potential negative impact on back dune track but could be applied to access routes specified elsewhere in the Bay such as on east side. Regarding the back dune track I think it will be necessary to come up with alternative access route from the south – preferably alternative access route should be proposed by applicants themselves. I understand they may be reluctant to propose less convenient access route but there may be no choice here. The option of considering how to reinforce the track will be difficult to pursue because of the wide range of users including casual users such as tourists, windsurfers etc. who might not be willing to observe constraints on usage – so alternative aquaculture specific access routing that avoids back dune area altogether would appear to be the way to go. Francis did some preliminary calculations on access route areas for this approach.
2. Grey Seals – I think this has been comprehensively addressed in the AA ; it is likely to impact on licensing of 1 or 2 sites proximate to the haul out area; We don't anticipate that aquaculture development elsewhere would impact significantly on the haul out area because of it's relatively isolated location and deep channel alongside
3. Mobile Sand Community – I think MED have built up a good working knowledge of the location of the mobile sand areas in the Bay based on many inspections carried out over the years. Our examination of past survey data and aerial photographs has also informed us of the changing low water channel positions in the Bay and historical change. Licensing is recommended only for stable substrates where there is not ovelap with shifting or soft sand areas or with low water channels.

Regards
Paul O'Sullivan

From: OMahony, Jane
Sent: 26 April 2019 09:49
To: OSullivan, Paul; 'Terry.McMahon@Marine.ie'; 'Francis X O Beirn'
Subject: An Tasice & DCHG response re Ballyness Bay Applications

Hi All,

We received the attached letters from An Taisce and Dept of Culture, Heritage and the Gaeltacht, can we please have your comments in relation to issues raised?

Kind Regards,

Jane O'Mahony
Aquaculture and Foreshore Management Division

An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture, Food and the Marine

Marine Institute

Date: May 7, 2019

To: Jane O'Mahoney - AFMD

From: Francis O'Beirn, Marine Institute

CC: Terry McMahon, Jeff Fisher-MI: Geraldine Farrell AFDM-DAFM

Re: An Taisce comments on aquaculture licence applications in Ballyness Bay.

The Marine Institute (MI) have been asked to comment on the submission from An Taisce to the Department of Agriculture Food and the Marine (DAFM) in relation to a number of aquaculture licence applications in Ballyness Bay in addition to the Appropriate Assessment Report and draft AA Conclusion Statement. The text below repeats the relevant An Taisce comments with the MI response following. In their submission, An Taisce cite a number of outputs of case law. As these legal issues are beyond the remit of the MI, ADFM may wish to seek their own legal advice in relation to the legal interpretations provided by An Taisce.

The MI highlight that in this submission (and others more recently), An Taisce, while criticising recommendations and proposed management actions in the AA process, offer no evidence to suggest that mitigation measures are insufficient. Their criticism appeared to be focused on challenging commonly used and accepted scientific terminology (within the AA Reports) and using this to present An Taisce's interpretation of case law. It should be pointed out that in natural systems, certainty can never be presented at 100%. We would suggest that mitigation measures proposed do remove all reasonable scientific doubt. Where this is not the case the MI will acknowledge this and communicate that there are no obvious measures possible that might mitigate or reduce the risk.

While the MI acknowledges the nature of the observations and the concerns highlighted by An Taisce, the MI does not see any need to revise the outputs or conclusions in the AA report underpinning the assessment process. However, it will be important to ensure that specific mitigation measure and management actions/licence conditions are clearly communicated in the DAFM final Conclusion Statement or report accompanying the Ministerial decision.

An Taisce Observations: Traffic disturbance

The increased traffic which would result from licensing of all the aquaculture applications poses a serious risk to fixed coastal dune habitats [2130]:

'the licencing of aquaculture activity at this site could lead to additional risk of erosion and degradation of this dune habitat [2130]. The risk of damage from vehicular traffic to dune habitat (2130) in Ballyness Bay therefore, cannot be discounted.'

The recommendation outlined in the AA report is the following:

'It is recommended that the views those with specific engineering expertise be sought in order to identify erosion prevention measures that might be put in place to mitigate the risks identified. Alternatively, the re-routing of access routes to avoid overlap with habitat feature 2130 might be considered?'

and the AA conclusion statement included this condition:

'A licence condition requiring strict adherence to the identified access routes over intertidal and nearshore habitat in order to minimise species/habitat disturbance will be included.'

but An Taisce would draw the Licensing Authorities attention to this line within the AA report:

'the risk arises from the additional traffic likely to occur on existing tracks as a result of the need to access the sites'

As such, An Taisce submit that this condition will be entirely ineffective and does not address the risk posed. The risk arises due to the level of traffic, and has nothing to do with adherence to the existing track. The licensing authority need to be able to conclude beyond reasonable doubt that the QI communities will not be disturbed. , as outlined in the ECJ

ruling for C-404/091 [Commission v Spain] which held that "[a]n assessment made under Article 6(3) of the Habitats Directive cannot be regarded as appropriate if it contains gaps and lacks complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the SPA concerned ."

Similarly, the court held in the case of the Commission v Italy that "assessment must be organised in such a manner that the competent national authorities can be certain that a plan or project will not have adverse effects on the integrity of the site concerned, given that, where doubt remains as to the absence of such effects, the competent authority will have to refuse permission." (C304/052. Para 58)

Before these sites can be licenced the relevant authority must be certain that there will be no significant impact on the qualifying habitat, and it is obvious from the AA report that the licensing authority do not currently possess the necessary information to reach this conclusion. As such we submit that licencing cannot proceed without contravening Article 6(3) of the Habitats Directive.

The suggestion in the AA report that the opinion of an engineer be sought, or that the traffic be re-routed, while valid, would lead to additional information which would need to then be made available for public scrutiny, by means of an additional public consultation period, prior to proceeding with licensing. To fail to do this would be in contravention of the Aarhus convention by failing to provide for adequate public participation, as required by the Aarhus Convention, which provides for access to information, and public participation in decision-making.

Further, the AA conclusion statement provides this line in the mitigation measures section:

'Alternative access routing will also be considered as a mitigation measure.' yet despite the clear risk posed by the main proposed access route, the necessity for the alternative route is not actually provided as a binding mitigation measure.

As such, given that the specifics of the alternative route were not provided as a part of this public consultation, the 'erosion prevention measures' are not detailed, and the necessity of an alternative route is not provided as a binding mitigation measure, it is our considered opinion that the licensing authority cannot proceed with licensing any of the proposed aquaculture applications without contravening both the Habitats Directive and the Aarhus convention.

Marine Institute Response: As identified above, the interpretation of the case law is beyond the remit of the MI. We note, however, that the recommendation in the AA report that alternative routes be sought is welcomed. We also note that analysis of the alternative routes may be presented in the Conclusion Statement as a management response. While a figure included in the Conclusion Statement indicating the alternative routes considered might have been informative, we would be of the view that the alternative route was considered, assessed and concluded to be non-disturbing. Notwithstanding, we would agree with the comment in relation to the AA conclusion statement in respect of the alternative access routes. It is the MI view that the specific management actions that are to be taken should clearly be stated and unambiguous and that they will be binding and enforced.

An Taisce Observations: Grey Seals

The introduction of aquaculture into Ballyness Bay poses a serious risk to Grey Seals, as outlined in the AA report:

'In relation to interactions between aquaculture operations and seal use of the site, the risk of disturbance cannot be discounted. It is important to note that the site, to date, has had very little aquaculture operations and therefore, the seals will have little opportunity to habituate to the activities.'

and:

Given that there are currently no aquaculture operations in Ballyness Bay, it is not certain that the introduction of significant levels of aquaculture operations will not impact on the site use by these Annex II species, in particular at those locations proximate to the this haul-out location. Therefore, the risk posed by the proposed aquaculture activities in Ballyness Bay to seal conservation features cannot be discounted.

An Taisce would direct the licensing authority to the paragraphs above which outline the requirement for certainty under the Habitats Directive, and the removal of doubt before licensing can continue. While we welcome the decision to refuse licensing of site [redacted] which is closest to the seal haul out area, the risk to the Grey Seals applies to the licensing of all of the aquaculture applications, as outlined above 'it is not certain that...significant levels of aquaculture operations will not impact on the site use by these Annex II species'.

An Taisce would highlight that while site [redacted] posed the greatest risk, the conclusions reached in the AA document indicate that it is the aquaculture activity in general which poses a risk, and this cannot be discounted. As such, similar to the traffic disturbance, to proceed with licensing while significant levels of uncertainty remain will place the licensing authority in contravention of Article 6(3) of the Habitats Directive.

Marine Institute Response: First, the MI takes issue with the use of the term 'serious risk' and the apparent suggestion that this term was used in a conclusion in the AA Report. **This term was not used in the AA report.** It should be noted (and we accept that it is not clear from the AA Report) that the species observed at the haul-out location in Ballyness Bay was not defined and could have been the Common Seal or the Grey Seal. Notwithstanding, we stand over the conclusions of the report based upon experience at other seal locations. Where seals do not have to share space (i.e., sandbank) with other activities, there tends to be acclimation and less likelihood of disturbance. We consider the greatest risk will originate from activities at the proposed aquaculture site identified. The management measures proposed are, in the view of the MI, appropriate.

An Taisce Observations: Mobile sand community

The AA report outlines the following:

'The sensitivity of the community type Mobile sand community complex is unknown given the wide variation in species composition and sedimentary characteristics that comprise this community type. In particular, areas where there are very 'soft' mobile sands with impoverished communities would appear to be sensitive to the placement of trestles and even foot traffic among the trestle rows. On this basis, it is assumed that intertidal shellfish culture has the potential to disturb this community type. '

In order to mitigate for this, it is proposed that:

'Mobile sand community complex is such that there are likely to be locations where the sediments are extremely mobile (and soft) thus making them unsuitable for aquaculture operations. It is recommended, prior to making a decision to licence, that these areas be clearly identified with the Bay' and

'Locations where the sediments are extremely mobile (and soft) thus making them unsuitable for aquaculture operations will be excluded from licensing'

However, An Taisce would highlight that these habitats are by definition mobile, and mapping of these will be subjective and unreliable considering the habitats are in constant flux. As such, a large degree of uncertainty remains, and licencing of oyster trestles within a habitat which is constantly in flux puts this community type at risk of disturbance. As such, An Taisce submit that without the necessary degree of certainty of suitability of these sites for supporting oyster trestles, the licencing authority should not proceed with licencing in this Bay.

Marine Institute Response: As above, the Marine Institute takes issue with the presentation by An Taisce of a truncated quotation from the report that provides incomplete information. The full section from which An Taisce selectively quote is as follows (sentence missing from An Taisce "quote" is highlighted in Bold below).

"The sensitivity of the community type Mobile sand community complex, is unknown given the wide variation in species composition and sedimentary characteristics that comprise this community type (NPWS 2014b). **While some characteristics of this community type match those described and investigated in Forde et al (2015) and O'Carroll et al (2016) others are quite different**. In particular, areas where there are very 'soft' mobile sands with impoverished communities would appear to be sensitive to the placement of trestles and even foot traffic among the trestle rows. On this basis, it is assumed that intertidal shellfish culture has the potential to disturb this community type."

We note also that the final quotation above (starting with "Locations where....) from An Taisce cannot be found in the AA Report.

In response, we believe the section removed from the first quotation is critical to counter the argument of An Taisce. It is clear that in the inner parts of the bay (at proposed culture sites), there are extremely stable sedimentary habitats representative of this community complex that are suitable for trestle culture and sufficiently resilient to disturbance. The MI considers that the recommendation in the AA Report is appropriate (italicised quote above).

Marine Institute
Foras na Mara

Date: May 27, 2019

To: Jane O'Mahoney - AFMD

From: Francis O'Beirn, Marine Institute

CC: Terry McMahon, Jeffrey Fisher-MI: Geraldine Farrell AFDM-DAFM

Re: Department of Culture, Heritage and the Gaeltacht comments on aquaculture licence applications in Ballyness Bay.

The Marine Institute (MI) have been asked to comment on the submission from Department of Culture, Heritage and the Gaeltacht (DCHG) to the Department of Agriculture Food and the Marine (DAFM) in relation to a number of aquaculture licence applications in Ballyness Bay. The text below repeats the NPWS comments with the MI response following.

The MI acknowledges the nature of the observations and the concerns highlighted by NPWS. The MI does not see any need to revise the outputs or conclusions in the AA report underpinning the assessment process.

DCHG Observations:

This is the first time the Department of Culture, Heritage and the Gaeltacht has issued comments on the Appropriate Assessment Report and draft Conclusion Statement for Ballyness Bay SAC (site code: 001090).

The Department welcomes the opportunity to provide observations concerning these documents and the aquaculture licence applications for the sites (T12/407B + 17 others) received on the 8th of March 2019. It is hoped that these observations will be considered by the Department of Agriculture, Food and the Marine in its decision-making process.

Fixed coastal dunes with herbaceous vegetation [2130] is an Annex I priority habitat. This Department recommends that access routes should avoid this habitat.

The Appropriate Assessment screens out a number of SPAs on the basis of no spatial overlap. However, the following SPAs - Falcarragh to Meenlaragh SPA (site code 004149), Inishbofin, Inishdooey and Inishbeg SPA (site code 004083) and Horn Head to Fanad Head SPA (site code 004194) lie within the 15km zone of impact (DEHLG, 2010) of Ballyness Bay. No rationale is given as to how or why potential detrimental interactions between the conservation features of these SPAs and aquaculture activities within Ballyness Bay were ruled out. It is therefore recommended that a more thorough and complete consideration of theses SPAs and their conservation features be documented in order to complete this appropriate assessment process.

Marine Institute Response:

The DCHG comment in relation to the dune habitat is noted and consistent with conclusions of the AA report.

It is noted that the comment from DCHG in relation to SPA screening is the first time, to our knowledge, this Department have requested additional detail in relation to a screening exercise of proximate Natura sites. To date, 30+ Natura reports have been produced.

The MI concurs that connectivity with regard to Natura sites is an important issue and this was considered when examining conservation objectives set for all proximate Natura sites. It should be noted that particular focus on the SPA sites considered in Natura assessment reports are Species of Conservation Interest (SCI) that would exclusively use intertidal sand-flat/mud-flat habitats. Mud-flat and sand-flats are not typical feeding areas for many of the SCIs identified in the SPAs in question. These species as they are likely to feed in a diverse range of offshore or terrestrial (in the case of

corncrake) habitats (Gittings and O'Donoghue 2012[1]). As such, many SCIs were considered unlikely to interact with the proposed activities. For those species that may utilise intertidal sedimentary habitats (i.e., gull species), it is the view of the MI that gull species will not rely to any great extent on the intertidal sandflats found in Ballyness Bay given alternative feeding habitat is available, e.g., terrestrial or open water—as is the case in this instance.

Furthermore, it should be noted, that the interaction with trestles by gull species was considered variable in the Gittings and O'Donoghue (2012) study, and at low abundance levels (up to 10) the predicted levels closely matched the observed levels (Gittings and O'Donoghue 2012), indicating little or no negative interaction. Given the low numbers of breeding pairs (i.e. 20) of Common Gulls found on Inishbofin, Inishdooey and Inishbeg SPA and that alternative habitat between these areas and the proposed culture sites can be found, we consider it unlikely that gulls that might attend the aquaculture areas in numbers that would result in adverse impact.

[1] Gittings, T. & O'Donoghue, P.D. (2012). *The effects of intertidal oyster culture on the spatial distribution of waterbirds.* Report prepared for the Marine Institute. Atkins, Cork.

An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

T12/441B

AQUACULTURE LICENCE

AQUACULTURE MARINE SHELLFISH INTER/SUB-TIDAL (Structures e.g. trestles)

Mr Anthony McCafferty

Glasscheroo,

Gortahork,

Co. Donegal

TABLE OF CONTENTS

T12/441B

AQUACULTURE LICENCE NO. XXXX

GRANTED UNDER THE FISHERIES (AMENDMENT) ACT, 1997 (NO. 23 of 1997)

The Minister for Agriculture, Food and the Marine (hereinafter referred to as the "Minister"), in exercise of the powers conferred on him by the Fisheries (Amendment) Act, 1997 (No. 23 of 1997) (hereinafter referred to as the "Act"), grants an Aquaculture Licence to:

Anthony McCafferty
Glasscheroo,
Gortahork,
Co. Donegal

(hereinafter referred to as the "Licensee") for the cultivation of Pacific Oysters using bags and trestles on a site in Ballyness Bay, Co. Donegal as specified in Schedule 1 attached (numbered T12/441B) and indicated by a red line on the attached map in accordance with the plans and drawing(s) in Schedule 2 attached as approved of by the Minister, subject to the Act and Regulations made under the Act and to the terms and conditions set out in the attached pages.

This Aquaculture Licence shall remain in force for a maximum period of ten (10) years commencing on XX XXXXXXXXX 20XX, provided for so long as the Foreshore Licence granted on XX XXXXXXXXX 20XX, under Section 3(1) of the Foreshore Act 1933 (No.12 of 1933) in respect of the same site for the purpose referred to is in force.

A person authorised under Section 15(1)
of the Ministers and Secretaries Act 1924 to authenticate the Seal of the Minister for Agriculture, Food and the Marine.

TERMS AND CONDITIONS APPLYING TO THIS AQUACULTURE LICENCE

1. **Licensed Area**

1.1 The area specified in ***Schedule 1*** attached (0.408 hectares) (labelled T12/441B) and outlined in red on the map(s) in ***Schedule 1***.

1.2 The co-ordinates for the site are based on the Irish National Grid Co-ordinate System.

2. **Species, Cultivation and Method Licensed**

2.1. Species to be farmed: Pacific Oysters

2.2. Method: Bag and Trestle subject to the stocking and/or deployment limits as may be specified in ***Schedule 4*** attached.

2.3. The introduction of seed to the site shall comply with the legislation relating to fish health.

3. **Infrastructure and Site Management**

Indemnity

3.1. The Licensee shall indemnify and keep indemnified the State, the Minister, his officers, servants or agents against all actions, loss, damage, costs, expenses and any demands or claims howsoever arising in connection with the construction, maintenance or use of any structures, apparatus, equipment or any other thing used in connection with the licensed operation in the licensed area or in the exercise of the rights granted under the licence and the Licensee shall take such steps as the Minister may specify in order to ensure compliance with this condition.

3.2. The duty of maintenance and responsibility for the upkeep and safety of the site rests with the Licensee.

Design, Arrangement and Maintenance of Structures

3.3. The Licensee shall ensure that the equipment (including all flotation, mooring and anchoring devices) is placed within the licensed area only. Storage or placement of equipment or stock on the foreshore or seashore outside the licensed area is not permitted under any circumstances.

3.4. The Minister may direct as to the deployment of apparatus and flotation devices and their colour, within the site.

3.5. The Licensee shall obtain the prior approval of the Minister to any proposed material change to the plan/drawings or equipment as approved being used during the licensing period as specified in ***Schedule 2*** attached.

3.6. The Licensee shall at all times for the duration of the licence keep all equipment used for the purposes of the licensed operations in a good and proper state of repair and condition to the satisfaction of the Minister or other competent State authority.

3.7. The Licensee shall ensure that each trestle grouping/pole and all flotation and mooring devices in the licensed area legibly bear the Aquaculture Licence Number in an indelible weatherproof format.

Operational Conduct

3.8. The Licensee shall conduct its operations in a safe manner and with regard for other persons in the area and the environment and shall ensure that the operations are not injurious to adjacent lands or the public interest (including the environment) and do not interfere with navigation or other lawful activity in the vicinity of the licensed area, and shall comply with any lawful directions issued by the Minister and any other competent State authority in that regard.

3.9. The Licensee shall ensure that any aquaculture or other activity conducted under this licence does not adversely affect the integrity of the Natura 2000 network (if applicable) through the deterioration of natural habitats and the habitats of species and/or through disturbance of the species for which the area has been designated in so far as such a disturbance may be significant in relation to the stated conservation objectives of the site concerned.

3.10. The Licensee shall ensure that tractors (or other vehicles) accessing and leaving the site adhere strictly to approved access and egress routes as specified in Schedule 1 attached. Full compliance is required in order to minimise disturbance to the foreshore and habitat. All drivers shall be made fully aware of the specific route approved.

3.11. The Licensee shall ensure that journeys back and forth on the approved access and egress routes are kept to the minimum necessary.

3.12. The Licensee shall ensure that all tractors/towing vehicles to be used for aquaculture purposes on the foreshore are fitted with efficient exhaust/silencers/mufflers and that vibration noise from tractors and machinery is kept to a minimum.

3.13. The Licensee shall ensure that all vehicles are properly maintained so as to prevent leakages of oils, fuels, grease etc.

3.14. The Licensee shall ensure that all vehicles move slowly at all times on the foreshore, that engine revolution is kept to a minimum and that engines are turned off when not in use.

3.15. The Licensee shall ensure that if more than one vehicle is needed on the shore that all vehicles, where possible, arrive and depart together.

3.16. The Licensee shall so organise its operations in consultation with other licensed operators to ensure that the total number of vehicles and harvesting machines on the foreshore on any one day is kept to the minimum necessary.

3.17. The Licensee shall ensure that when carrying out aquaculture work on the foreshore, dogs owned or under the control of the Licensee shall not be present, in order to minimise disturbance to the birdlife in the area.

3.18. The Licensee shall ensure that best practice is employed to keep structures and netting clean at all times and any biofouling by alien invasive species shall be removed and disposed of in a responsible manner. In particular, in 'Natura 2000' sites care must be taken to ensure that any biofouling by alien invasive species will not pose a risk to the conservation features of the site. Measures to be undertaken are set out in the draft Marine Code of Practice prepared by Invasive Species Ireland and can be found on the web site at: **http://invasivespeciesireland.com/.**

Waste Management

3.19. The Licensee shall ensure that the licensed and adjoining area shall be kept clear of all redundant structures (including apparatus, equipment and/or uncontained stock), waste products and operational litter or debris and shall make provision for the prompt removal and proper disposal of such material. If the Licensee refuses or fails to do so, the Minister may cause the said structures, apparatus, equipment or other thing to be removed and the licensed area restored and shall be entitled to recover from the Licensee as a simple contract debt in any court of competent jurisdiction all costs and expenses incurred by him in connection with the removal and restoration.

Inspection

3.20. The licensed area and any equipment, structure, thing, or premises wherever situated used in connection with operations carried out in the licensed area shall be open for inspection at any time by an authorised person (within the meaning of Section 292 of the Fisheries (Consolidation) Act 1959) (No. 14 of 1959) (as amended by Fisheries Act 1980) (No. 1 of 1980), a Sea Fisheries Protection Officer (within the meaning of Sea Fisheries and Maritime Jurisdiction Act 2006) (No. 8 of 2006) or any other person appointed in that regard by the Minister or other competent State authority.

3.21. The Licensee shall give all reasonable assistance to an authorised officer or a Sea Fisheries Protection Officer or any person duly appointed by any competent State authority to enable the person or officer enter, inspect, examine, measure and test the licensed area and any equipment, structure, thing or premises used in connection with the operations carried out in the licensed area and to take whatever samples may be deemed appropriate by that person or officer.

3.22. The Licensee shall keep and maintain in the State for inspection on demand by the Minister or a competent State authority, at all times, records of all operations including compliance monitoring and any required follow up action. These records shall be produced by the Licensee on demand by the Minister or other competent State authority and in any event not later than 24 hours from the making of that demand.

3.23. The Licensee shall furnish to the Minister or other competent State authority in the form and at the intervals determined by the Minister or other competent State authority, such information relating to the licensed area as may be required to

determine compliance by the Licensee with the terms of this licence and applicable legislation.

4. **Navigation and Safety**

4.1. The Licensee shall ensure that Statutory Sanction from the Commissioners of Irish Lights is in place prior to the commencement of operations, regarding all aids to navigation. Statutory Sanction forms are available at http://www.cil.ie/safety-navigation/statutory-sanction.aspx.

4.2. The Licensee shall ensure that the site is marked in accordance with the requirements of both the Marine Survey Office and the Commissioners of Irish Lights as specified in ***Schedule 3***.
The navigation marking detail is as illustrated in ***Schedule 3***.

4.3. The Licensee shall comply with any specification requirement relating to navigational aids, flotation and mooring devices, supporting/marking posts/poles, as required by the Minister or any other competent State authority.

4.4. The Minister's determination in respect of this licence is conditional upon immediate full compliance by the Licensee in respect of all requirements and conditions which are imposed under the relevant legal provisions applicable to the Marine Survey Office.

4.5. Prior to commencement of operation the Licensee shall inform the UK Hydrographic Office at Taunton, of the location and nature of the site in order that charts and nautical publications can be updated. Tel: 00 44 1823337900 Fax: 00 44 1823 284077 Email: sdr@ukho.gov.uk the Licensee shall submit proof to the Department within 14 days of the date of this licence that the UK Hydrographic Office has been so informed.

5. **Monitoring**

5.1. The Licensee shall undertake and/or partake in monitoring, in particular environmental monitoring, as directed by the Minister or other competent State authority.

6. **Fish Health / Mortality Management / Movement of Fish**

Fish Health Regulations

6.1. Before the site is stocked the Licensee shall ensure that a Fish Health Authorisation under statutory provisions giving effect to Council Directive No. 2006/88/EC, as amended, or any other legislative act that replaces that Directive on animal health requirements for aquaculture animals and their products, and on the prevention and control of certain diseases in aquatic animals, is in place.

Disposal of Mortalities

6.2. The Licensee shall dispose of dead fish in accordance with the applicable statutory provisions and requirements.

Movement of Fish

6.3. The Licensee shall comply with any regulations in force governing the movement of fish.

7. Duration, Cessation, Review, Revocation, Amendment, Assignment

Duration, Cessation

7.1. This Licence shall remain in force until XX XXXXXXXXX, 20XX and as long as the accompanying Foreshore Licence remains in force.

Review

7.2. The Licensee may apply for a review of the licence at any time after the expiration of three years since the granting of the licence or its last renewal in accordance with section 70 of the Act.

Revocation, Amendment

7.3. Subject to the Act, the Minister may revoke or amend the licence if:–

(a) he considers that it is in the public interest to do so,
(b) he is satisfied that there has been a breach of any condition specified in the licence e.g., operating outside the licensed area,
(c) the licensed area to which the licence relates is not being properly maintained,
(d) water quality results or general performance in the licensed area do not meet the standards set by the Minister or the competent State authority.

Assignment

7.4. This Licence shall not be assigned without the prior written consent of the Minister and may not be assigned during the period of three years, dating from the commencement or renewal of this licence, unless the Minister determines that it may be assigned under condition 7(5) or the condition set out in 7(6) applies.

7.5. A Licensee, who considers that there are exceptional reasons for the assignment of the Licence during the first three years, may apply to the Minister, giving those reasons, for a determination that the Licence may be assigned. The Minister may, at his discretion, having considered the reasons given by the Licensee, determine whether or not the Licence may be assigned. The determination of the Minister in this regard is final.

7.6. Where the Licensee is a company (within the meaning of the Companies Acts) and goes into Liquidation (within the meaning of the Companies Acts) in the first three years dating from the commencement of the licence, the Liquidator shall, with the consent of the Minister, be entitled to assign the licence to enable him to discharge any debts of the liquidated company.

7.7. This licence is issued subject to any order that the High Court may make under section 218 of the Companies Act 1963 or otherwise with regard to the assignment of this licence.

8. **Fees**

8.1. The Licensee shall pay to the Minister an annual aquaculture licence fee in accordance with the Aquaculture (Licence Application and Licence Fees) Regulations 1998(S.I. No. 270/1998) as amended by the Aquaculture (Licence Fees) Regulations 2000 (S.I. No. 282 of 2000) or an amount payable under Regulations made under section 64 of the Act.

8.2. The Minister may revoke the licence where the Licensee fails to pay the aquaculture licence fees on demand.

9. **General Terms and Conditions**

9.1. The Licensee shall at all times comply with all laws and protocols applicable to aquaculture operations.

9.2. Any reference to a statute or an act of an institution of the European Union (whether specifically named or not) includes any amendments or re-enactments in force and all statutory instruments, orders, notices, regulations, directions, bye-laws, certificates, permissions and plans made, issued or given effect under such legislation shall remain valid.

9.3. If any condition or part of a condition in this licence is held to be illegal or unenforceable in whole or in part, such condition shall be deemed not to form part of this licence but the enforceability of the remainder of this licence is not affected.

9.4. The Licensee shall at all times hold all necessary licences, consents, permissions, permits or authorisations associated with any activities of the Licensee in connection with the licensed area.

Notification

9.5. Without prejudice to any other remedy under the licence or in law, if the Minister is of the view that the Licensee is in breach of any obligation under this licence, the Minister may, by notice in writing, require that the Licensee rectifies such breach, within such time as is specified by the Minister. The Licensee shall comply with any direction of the Minister within the time specified in the notice.

9.6. Any notice to be given by the Minister may be transmitted through the Post Office addressed to the Licensee at the last known address of the Licensee.

9.7. The Licensee shall notify the Minister within 7 days of any change in the Licensee's address, telephone, e-mail or facsimile number.

Tax Clearance Certificate

9.8. During the term of this licence the Licensee shall provide to the Minister on demand a current tax clearance certificate.

Companies and Co-operatives

9.9. In the event of the licence being granted to a company (within the meaning of the Companies Acts), control of the licensee company shall not change in any respect

from the control of the company as existed on the date that the licence was granted so long as this licence shall remain in force save with the prior written permission of the Minister.

9.10. In the event of a licence being granted to a company that has been incorporated outside this State, the licensee company shall register with the Companies Registration Office within one month of the establishment of a place of business in the State or alternatively, within one month of the establishment of a branch of the said company in the State and the licensee company shall submit proof to the Department within 14 days of the end of that month that it has been so registered.

9.11. Where the licensee is a company within the meaning of the Companies Acts, the licensee company shall ensure that it does not become dissolved within the meaning of the Companies Acts for so long as this licence shall remain in force.

9.12. In the event of the licence being granted to a society (within the meaning of section 2 of the Industrial and Provident Societies (Amendment) Act 1978 (No.23 of 1978) the following conditions shall apply:-

9.12.1. The rules relating to membership of the society shall enable any resident of the State to become a member of it where the resident fulfils all the conditions laid down by the society for membership of it and the rules shall not lay down different conditions for different classes of people;

9.12.2. The rules relating to the society as submitted to the Minister before the grant of this licence shall not be amended subsequently other than with the written permission of the Minister; and

9.12.3. The Minister may, if he considers it necessary in the interests of good management of the licensed area, direct that an amendment may be made to the rules of the society, and the Licensee shall amend the rules in accordance with that direction.

Clearance of Site

9.13. The Licensee shall, at the Licensee's own expense, if so required by written notice from the Minister and within three weeks after receipt of such notice or on cessation of the licence for any other cause, remove the structures, apparatus, equipment or any other thing to the satisfaction of the Minister. If the Licensee refuses or fails to do so, the Minister may cause the said structures, apparatus, equipment or other thing to be removed and the licensed area restored and shall be entitled to recover from the Licensee as a simple contract debt in any court of competent jurisdiction all costs and expenses incurred by him in connection with the removal and restoration. The Licensee shall take such steps as the Minister may specify in order to secure compliance with this condition.

SCHEDULE 1

Schedule 1 contains:

- **the co-ordinates of the site based on the Irish National Grid Co-ordinate System and the area of the site**
- **site map(s) which also shows the access/egress route to and from the site**
- **a chart showing the location of the site in relation to the surrounding area.**

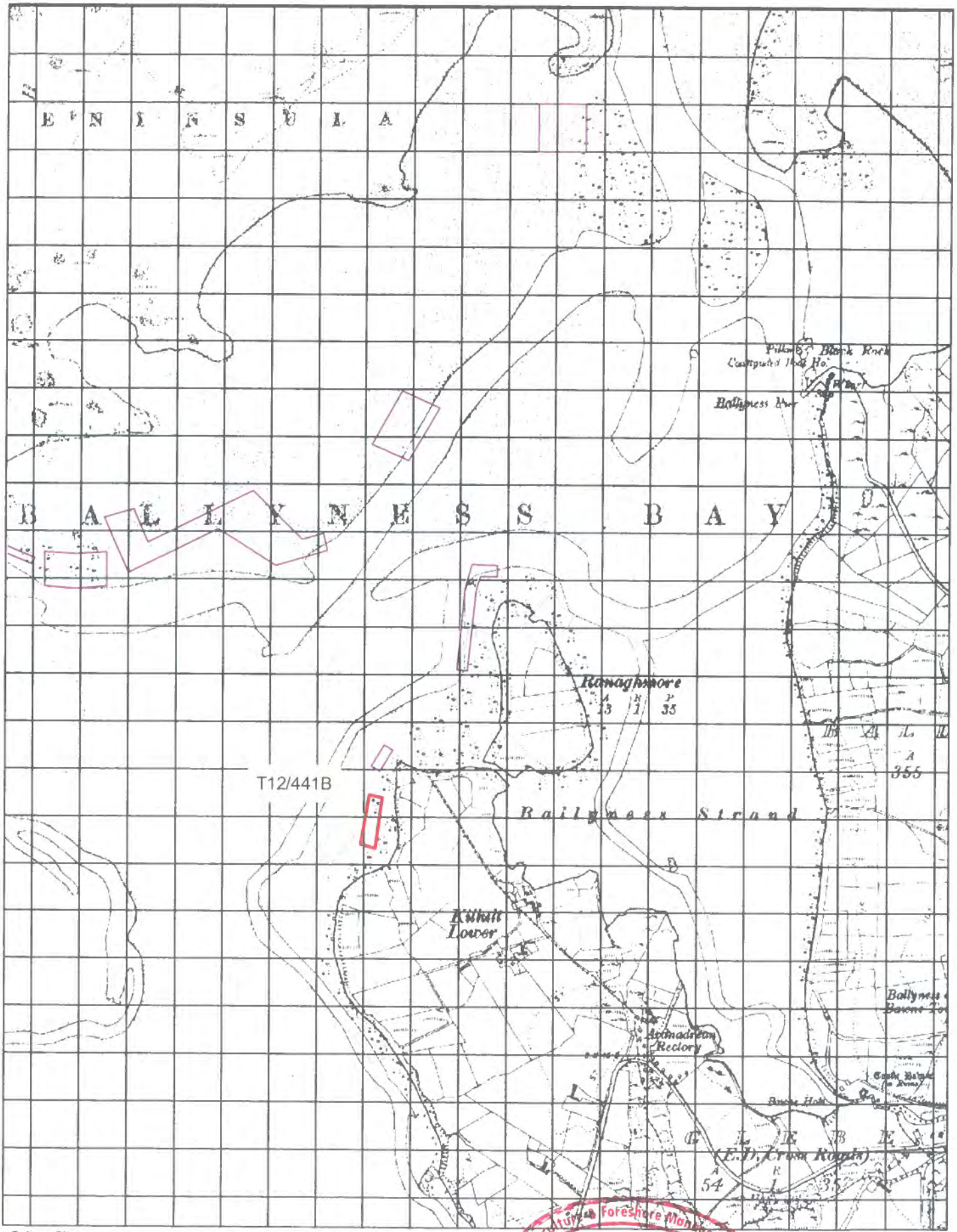
1 NO. SITE AT BALLYNESS BAY CO.DONEGAL

Co-ordinates & Area

Site T12/441B (0.408 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

191311, 432745 to Irish National Grid Reference point
191337, 432740 to Irish National Grid Reference point
191323, 432634 to Irish National Grid Reference point
191293, 432642 to Irish National Grid Reference point



Aqua Culture Sites

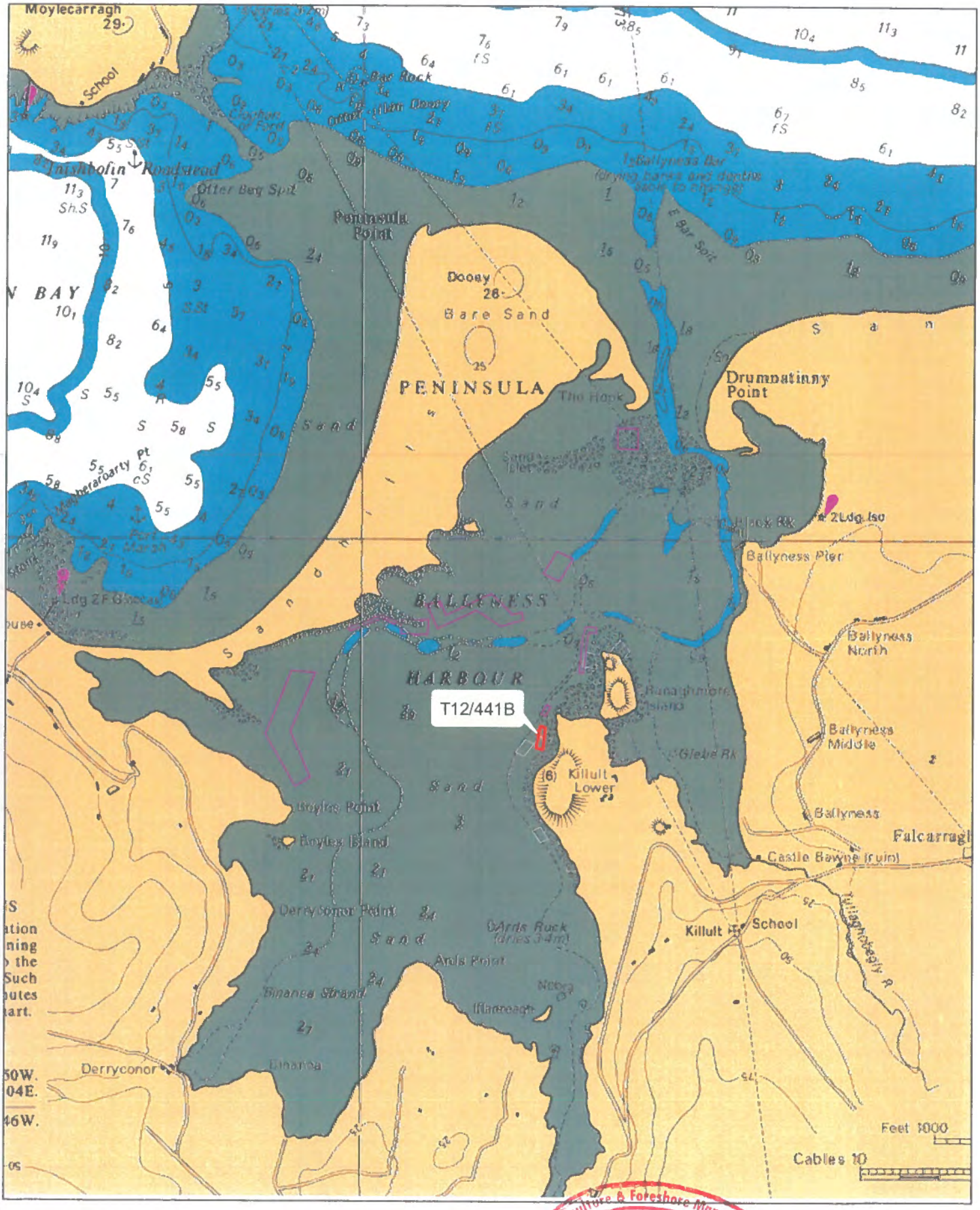
<all other values>

Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn
- 100 Meter Reference Grid

1:10,560

Site highlighted in red denotes application.



Aqua Culture Sites

<all other values>

Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn

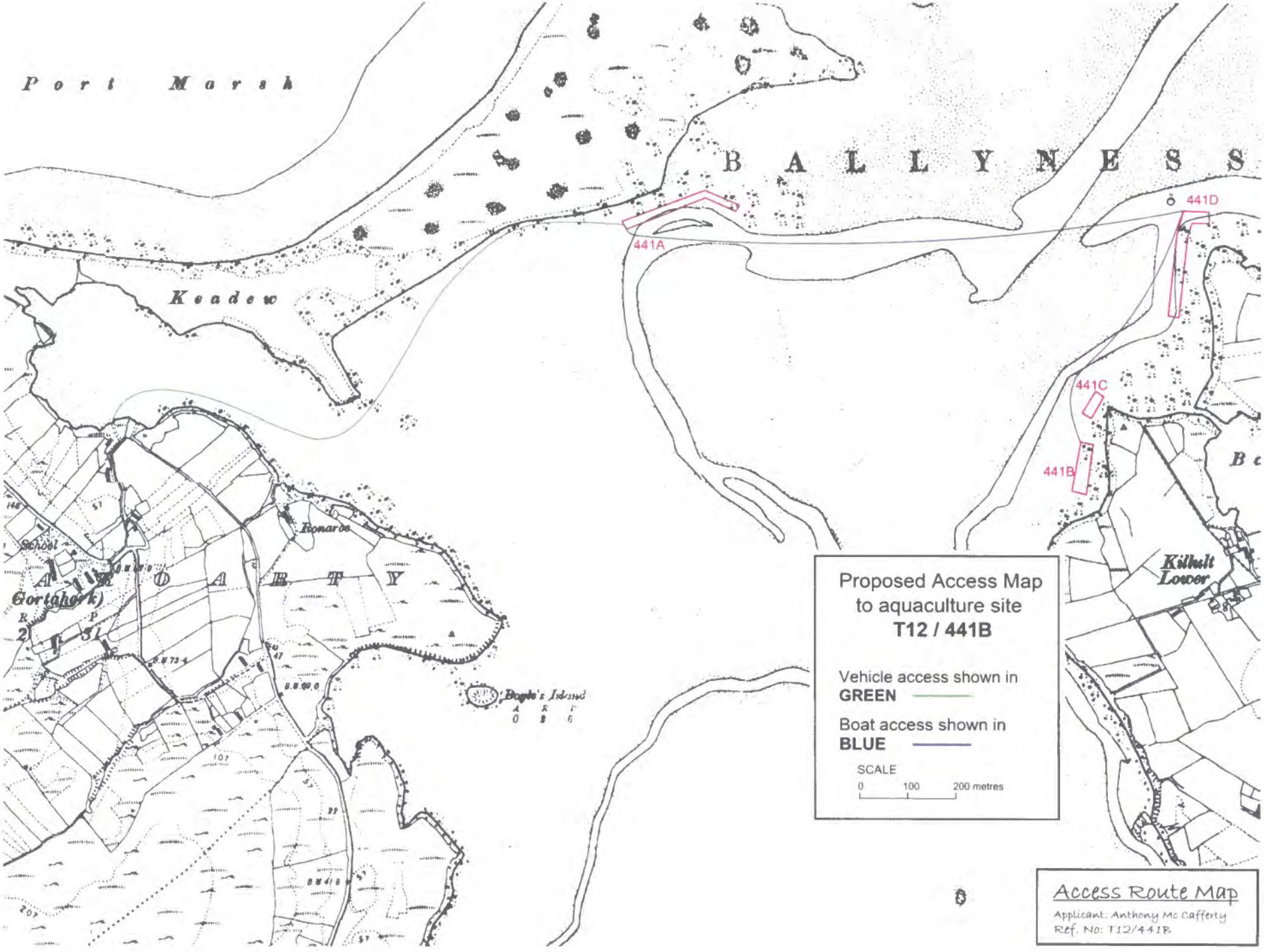
1:24,000

Site highlighted in red denotes application.

Part of Admiralty Chart No 2752-0
Not to be used for Navigation

Aquaculture & Foreshore Management Division
27 SEP 2013
Dept of Agriculture, Food & the Marine

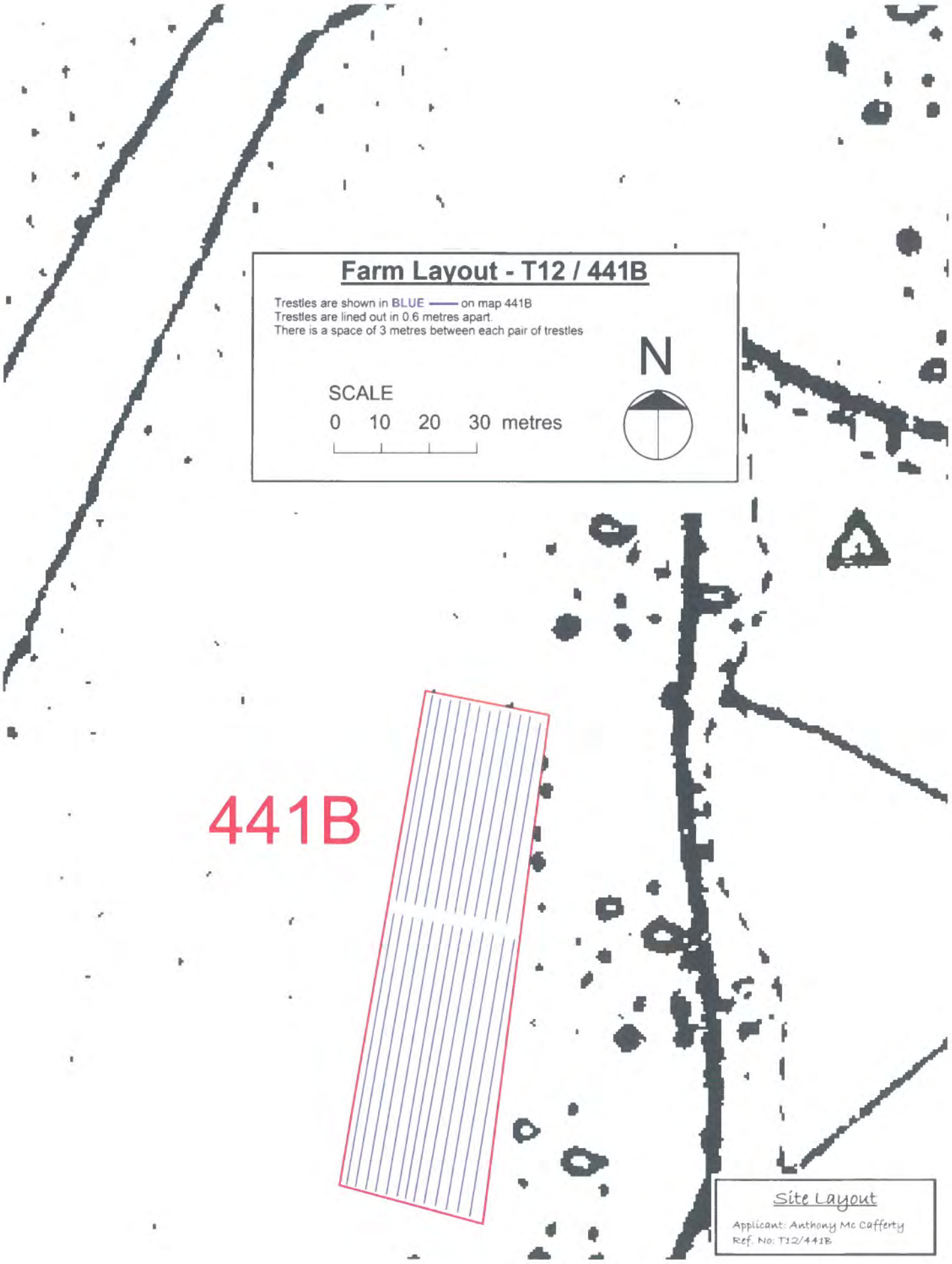
Department of Agriculture, Food and the Marine
An Roinn Talmhaíochta, Bia agus Mara


Port Marsh
BALLYNESS
Keadew
441A
441B
441C
441D
Bonaroe
School
Gortahork
Beagle's Island
Killult Lower
Proposed Access Map
to aquaculture site
T12 / 441B
Vehicle access shown in
GREEN
Boat access shown in
BLUE
SCALE
0 100 200 metres
Access Route Map
Applicant: Anthony Mc Cafferty
Ref. No: T12/441B

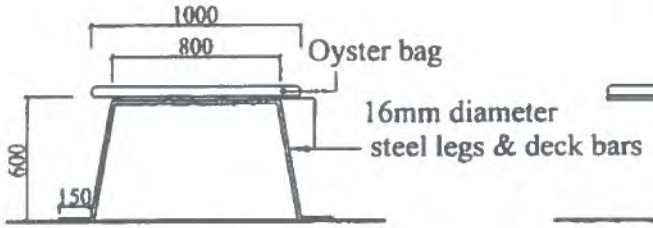
SCHEDULE 2

Schedule 2 contains:

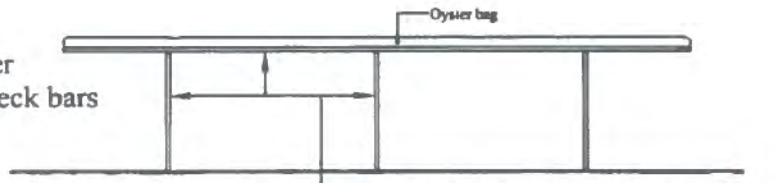
- **the approved plans and drawing(s)**


Farm Layout - T12 / 441B
Trestles are shown in BLUE —— on map 441B
Trestles are lined out in 0.6 metres apart.
There is a space of 3 metres between each pair of trestles
N
SCALE
0 10 20 30 metres
441B
Site Layout
Applicant: Anthony Mc Cafferty
Ref. No: T12/441B

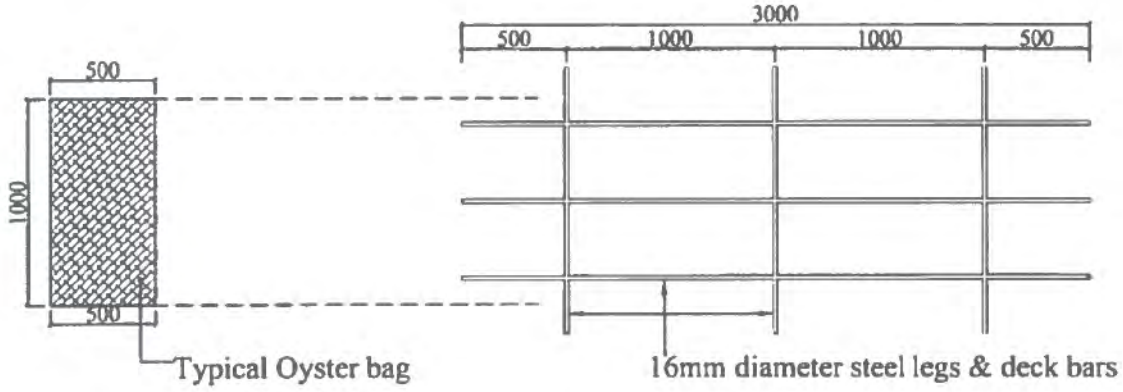
Trestle Detail



Cross Section



Elevation



Plan

Trestle Design

Applicant: Anthony Mc Cafferty

Ref. No. 12/441B

SCHEDULE 3

Schedule 3 contains:

- **requirements of CIL**
    - That the applicant secures Statutory Sanction from the Commissioner of Irish Lights for the aids to navigation that are required and approved by the Marine Survey Office. These aids should be in place before the development on the site commences.

- **requirements of the MSO / the navigation marking detail.**

    - Sanction to be established for the following marks:-

      Posts, projecting two meters above sea level at highest astronomical tide and with a topmark of a diagonal St Andrews cross, painted yellow should be erected at the seaward corners of the development (total three poles).

      An additional pole should be placed on the extreme landward corners of the development (total two poles).

    - The agreed site marking should be in place before the development on the site commences.

SCHEDULE 4

Schedule 4 contains:

- The Licensee must contact their local Sea Fisheries Protection Authority (SFPA) office to organise a classification and biotoxin monitoring programme for the site prior to commencing operations.

- All requirements of the SFPA must be complied with including the need to have classification assigned prior to commencing operations.

- A gap provision of 10m wide at 100m intervals between trestles within the sites in this area must be maintained to allow small craft access at low tide.

- Only Triploid stock to be used on this site.

- The source of seed, where applicable, must be approved by the Department of Agriculture Food and the Marine.

- Any change to the source of seed must be approved in advance by the Department of Agriculture Food and the Marine.

- Prior to the commencement of operations at the site the Licensee is required to prepare a Contingency Plan for the approval of the Department of Agriculture Food and the Marine which shall identify, inter alia, methods for the removal from the environment of any invasive non-native species introduced as a result of operations at this site. If such an event occurs, the contingency plan shall be implemented immediately.

- The access route must be strictly adhered to at all times, in order to minimise habitat disturbance.

An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

T12/441B

FORESHORE LICENCE

Mr Anthony McCafferty

Glasscheroo,

Gortahork,

Co. Donegal

TABLE OF CONTENTS

TERMS AND CONDITIONS APPLICABLE TO FORESHORE LICENCE

SEAL OF OFFICE AND SIGNATURES

SCHEDULE 1

FORESHORE LICENCE IN RESPECT OF A SITE (NUMBERED T12/441B) AT BALLYNESS BAY, CO. DONEGAL

AGREEMENT made on the XX XXXXXXX 20XX, between the Minister for Agriculture, Food and the Marine (hereinafter referred to as the "Minister" which expression shall include his Successors or Assigns where the contract so requires or admits), of the one part, and

MR ANTHONY MCCAFFERTY
GLASSCHEROO,
GORTAHORK,
CO. DONEGAL

(hereinafter referred to as the "Licensee") of the other part, whereby the Minister, in exercise of the powers conferred on him by Section 3 of the Foreshore Act, 1933 (No.12 of 1933) hereby grants to the Licensee licence to use and occupy that part of the foreshore at Ballyness Bay, Co. Donegal (numbered T12/441B) detailed in the attached schedule and more particularly delineated on the map annexed hereto and thereon coloured red for the purpose of the cultivation set out in Aquaculture Licence Number XXX on the terms and conditions set out in the attached pages.

This Foreshore Licence shall remain in force for a maximum period of ten (10) years commencing on XX XXXXXXXXX 20XX, provided for so long as the Aquaculture Licence Number XXX granted on XX XXXXXXX 20XX under the Fisheries (Amendment) Act 1997 (No. 23 of 1997) in respect of the same site for the purpose referred to is in force.

TERMS AND CONDITIONS APPLICABLE TO FORESHORE LICENCE

1. The Licensee shall pay to the Minister the annual sum of € XXXXX (XXXXX euro XXX cent), such payment to be made on the XX day of XXXXXXXXX in every year during the continuance of this Licence, the first of such payments to be made on the signing hereof.

2. The Licensee shall use that part of the foreshore, the subject matter of this Licence, for the cultivation set out in Aquaculture Licence Number XXX only and for no other purpose whatsoever.

3. The Licensee shall comply fully with all terms and conditions of Aquaculture Licence Number XXX.

4. The Licensee shall indemnify and keep indemnified the State, the Minister, his officers, servants or agents against all actions, loss, damage, costs, expenses and any demands or claims however arising in connection with the construction, maintenance or use of any structures, apparatus, equipment or any other thing used in connection with the licensed operation in the licensed area or in the exercise of the rights granted under the licence and the Licensee shall take such steps as the Minister may specify in order to ensure compliance with this condition.

5. The duty of maintenance and responsibility for the upkeep and safety of the site rests with the Licensee.

6. The Minister shall be at liberty at any time to terminate this Licence by giving to the Licensee three months notice in writing ending on any day, and upon determination of such notice, the Licence and permission granted shall be deemed to be revoked and withdrawn without the liability for the payment of any compensation by the Minister to the Licensee.

7. Any notice to be given by the Minister may be transmitted through the Post Office addressed to the Licensee at the last known address of the Licensee.

8. The Licensee shall not carry out any operations authorised by the Licence in the licensed area in such a manner as to interfere unreasonably with fishing or navigation in the vicinity of the licensed area and shall comply with any direction given to the Licensee in that regard by the Minister.

9. In the event of the breach, non-performance or non-observance by the Licensee of any of the conditions herein contained, the Minister may forthwith terminate this Licence without prior notice to the Licensee.

AND IT IS HEREBY CERTIFIED THAT:

1. For the purpose of the stamping of this Instrument that this is an Instrument to which the provisions of Section 53 of the Stamp Duties Consolidation Act 1999 (No. 31 of 1999), do not apply for the reason that the entire of the property involved comprises Foreshore and contains no Buildings.

2. The Family Law Acts of 1976, 1981, 1989, 1995 and the Family Law (Divorce) Act 1996 do not affect the Property.

SEAL OF OFFICE AND SIGNATURES

PRESENT when the Seal of Office
of the MINISTER FOR AGRICULTURE, FOOD AND THE MARINE
was affixed and was authenticated
by the Signature of:

_____

A person so authorised under Section 15(1) of the Ministers and Secretaries Act, 1924 to authenticate the seal of the Minister.

WITNESS: _____

ADDRESS: _____

_____

OCCUPATION: CIVIL SERVANT

SIGNED on behalf of Licensee _____

in the presence of:

WITNESS: _____

ADDRESS: _____

_____

OCCUPATION: _____

SCHEDULE 1

Schedule 1 contains:

- **the co-ordinates of the site based on the Irish National Grid Co-ordinate System and the area of the site**
- **site map(s)**
- **a chart showing the location of the site in relation to the surrounding area.**

1 NO. SITE AT BALLYNESS BAY CO.DONEGAL

Co-ordinates & Area

Site T12/441B (0.408 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

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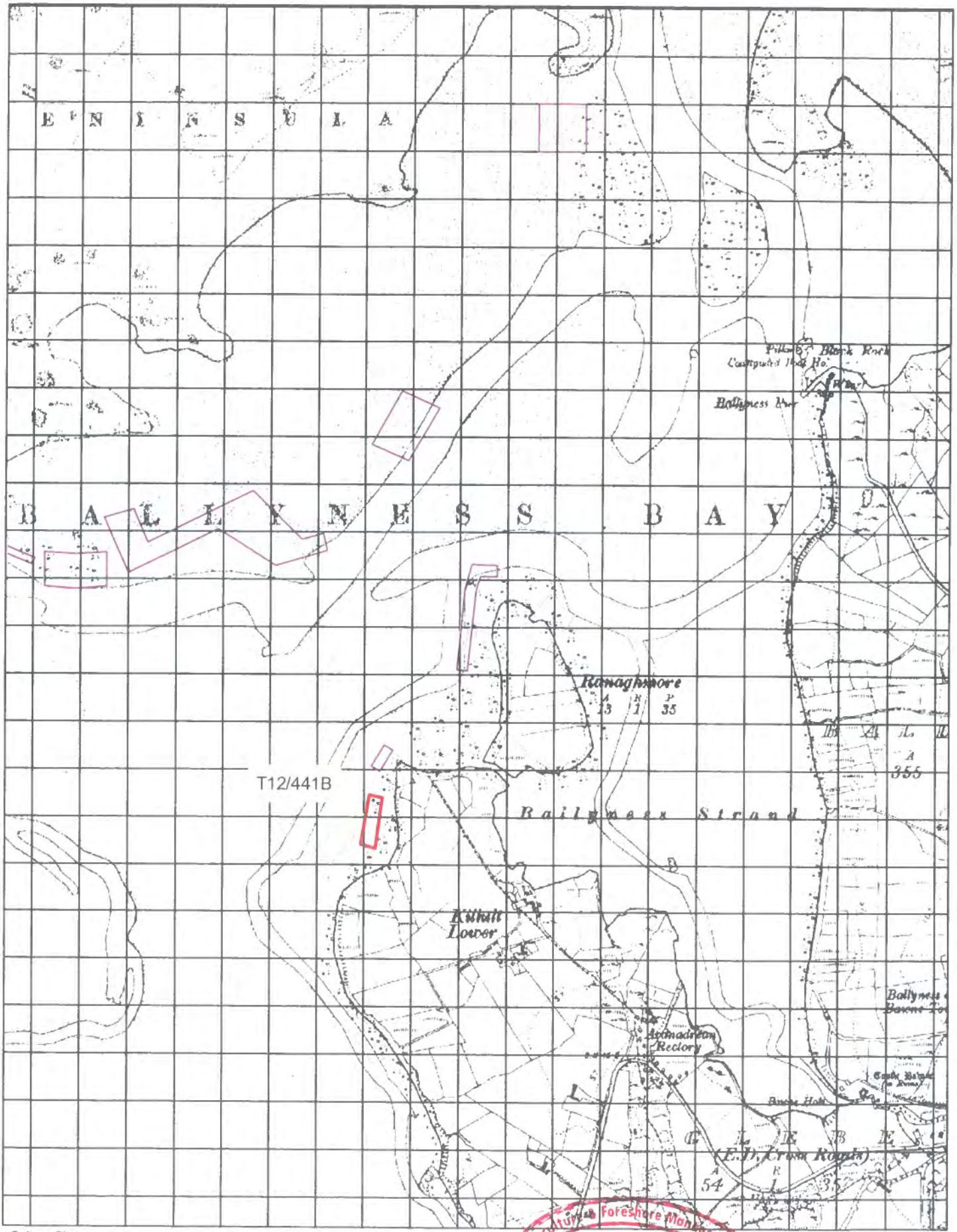


Aqua Culture Sites

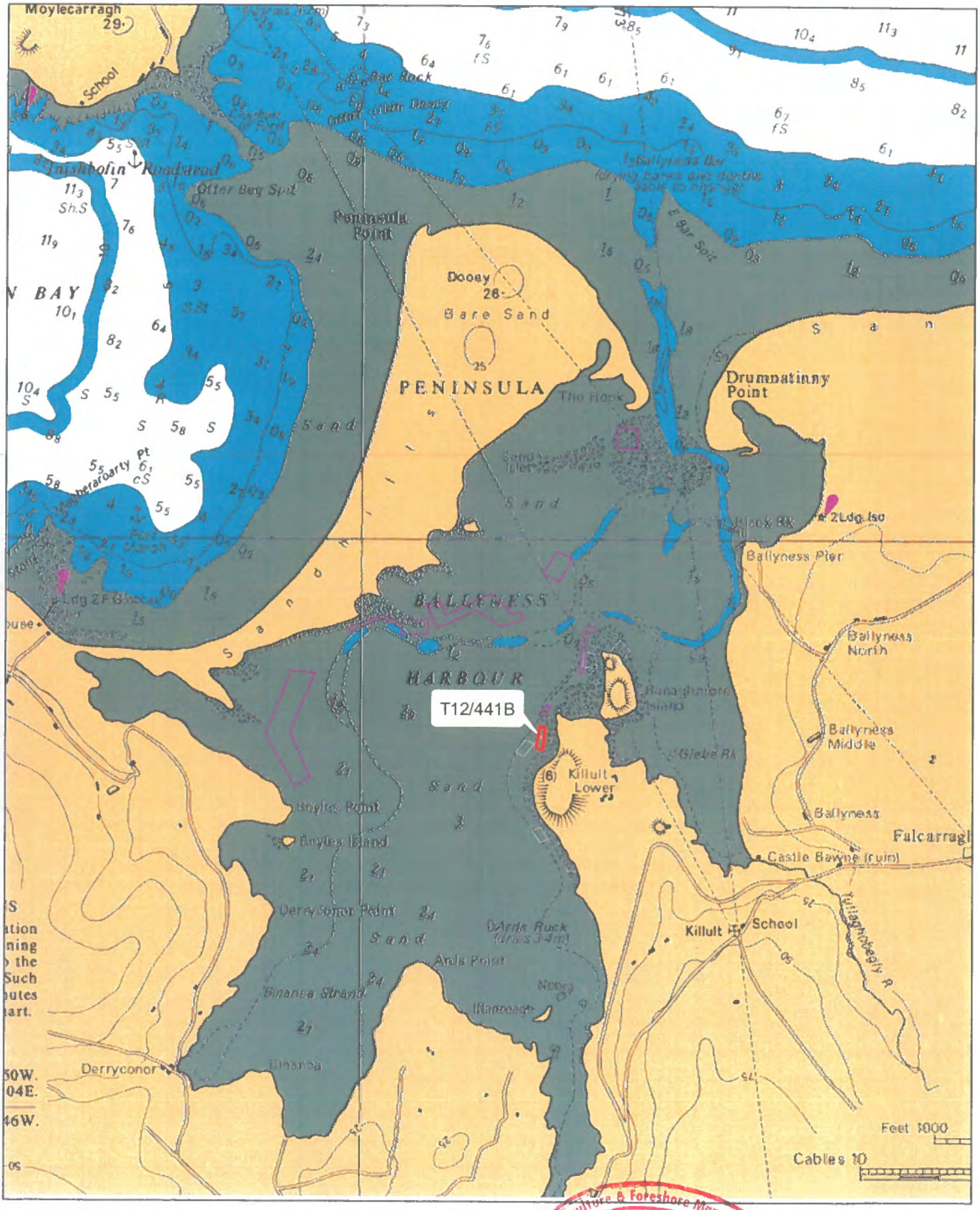
<all other values>

Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn
- 100 Meter Reference Grid

1:10,560

Site highlighted in red denotes application.



Aqua Culture Sites

<all other values>

Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn

1:24,000

Site highlighted in red denotes application.

Part of Admiralty Chart No 2752-0
Not to be used for Navigation

Aquaculture & Foreshore Management Division
27 SEP 2013
Dept of Agriculture, Food & the Marine

Department of Agriculture, Food and the Marine
An Roinn Talmhaíochta, Bia agus Mara

OMahony, Jane

From: Tony Mc Cafferty [redacted]
Sent: 25 February 2019 18:47
To: OMahony, Jane
Subject: Re: T12/441 Ballyness Bay, Co Donegal.

Hi Jane,

Sites T12/441 B[redacted]are oysters only
Sites[redacted]

Reagrds

From: OMahony, Jane <Jane.OMahony@agriculture.gov.ie>
Sent: Monday 25 February 2019 16:27
To: [redacted]
Subject: T12/441 Ballyness Bay, Co Donegal.

Dear Mr. McCafferty,

We are currently processing your application for T12/441 and getting ready for public consultation.
Your application form states oysters and clams production and your site drawings have a combination of both (T12/441[redacted].
Can you confirm which of the sites ([redacted] T12/442B, [redacted]) are oyster only and which sites are clams and oysters?

Thanks.

Jane.

Jane O'Mahony
Aquaculture and Foreshore Management Division

An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture Food and the Marine

An Lárionad Bia Mara Náisiúnta, An Cloichín, Cloich na Coillte, Corcaigh, P85 TX47
National Seafood Centre Clogheen, Clonakilty, Co. Cork, P85 TX47

T +353 023 883 9577
www.agriculture.gov.ie

AQUACULTURE - LICENSING UNDER

FISHERIES (AMENDMENT) ACT, 1997 and

FORESHORE ACT, 1933

SHELLFISH AND FINFISH

Aquaculture and Foreshore Licence Application Form

Important Note

Section 4 of the Fisheries and Foreshore (Amendment) Act, 1998 (No. 54) prohibits any person making an application on or after 10 December 1998 for an Aquaculture Licence from commencing aquaculture operations until duly licensed under the Fisheries (Amendment) Act, 1997 (No. 23), and provides that a breach of that prohibition will cause the application to fail.

Aquaculture & Foreshore Management Division
Department of Agriculture, Fisheries & Food
Clogheen
Clonakilty, Co. Cork

Fax: (023) 8821782

AQUACULTURE AND FORESHORE LICENSING APPLICATION FORM, for purposes of FISHERIES (AMENDMENT) ACT, 1997 and FORESHORE ACT, 1933

Accompanying Guidance Notes should be read before completing this form.

Note: Details provided in Parts 1 and 2 will be made available for public inspection.
Details provided in Part 3 are confidential and are not for public disclosure.

USE BLOCK CAPITALS IN BLACK INK

For Office Use
Application Ref. No. T12/441
Date of receipt, (Dept. Stamp): COASTAL ZONE MANAGEMENT DIVISION 26 AUG 2011 DEPT. OF AGRICULTURE, FISHERIES & FOOD

PART 1: PRELIMINARY DETAILS

Name(s) of Applicant(s) in full:
1.A ANTHONY Mc CAFFERTY
1.B

Address(es) of Applicant(s) in full:

1.A	1.B
GLASSERCHOO	
GORTAHORK	
Co DONEGAL	
RSI/I	
Tel:	Tel: Fax:

1.C TYPE OF APPLICATION — Insert X in relevant box

Indicate the relevant type of application:

-(i) Aquaculture Licence	BALLYNESS BAY	X
-(ii)Trial Licence	PACIFIC CLAMS AND	
-(iii)Review of Aquaculture Licence	PACIFIC OYSTERS	
-(iv)Renewal of Aquaculture Licence		
-(v) Foreshore Licence		X

(This Application Form is valid for each type of application.)

1.D TYPE OF AQUACULTURE

Indicate the relevant type of application:

-(i) Land-based	
-(ii) Marine-based	X
-Shellfish	
(iii) - extensive	
(iv) – intensive	X
-(v) Finfish	

1.E DOCUMENTS ENCLOSED WITH THIS APPLICATION

The following documents are enclosed with this application:

(1) - Ordnance Survey Map (Scale of 1: 10,560, ie, a six inch map) *OBLIGATORY*	X
(2) - British Admiralty Chart (largest available scale)	X
(3) - Decision of planning authority under Planning Acts	
(4) - Copy of licence under Section 4 of Local Government Water Pollution) Act, 1977	
(5) - Environmental Impact Statement	
(6) - Drawing of the structures to be used and/or the layout of the farm *OBLIGATORY*	X
(7) - Water Quality Analysis Report (required for Land-based sites only)	
(8) - Application Fee OBLIGATORY	X

(9) - Other (specify): _____

PART 2: DETAILS RELATING TO PROPOSED AQUACULTURE PROJECT

2.A Employment, Qualifications, Experience, Etc.

(i) Details of Applicant's qualifications and experience in aquaculture:

I GAINED EXPERIENCE FROM WORKING ON OTHER CLAM AND OYSTER OPERATIONS. ALSO VISITED CLAM AND OYSTER HATCHERIES

(ii) Other relevant experience (courses attended, etc): SPENT MANY YEARS GATHERING SHELLFISH ALONG THE PROPOSED SITE

(iii) Details of projected employment creation during first four years of proposed development:

YEAR 1 + 2 : 2 PART TIME JOBS CREATED

YEAR 3 + 4 : 2 FULL TIME AND 1 PART TIME

(iv) Projected employment (number of persons):

Year 1:	2 PART TIME	Year 2:	2 PARTTIME	Year 3:	2 FULLTIME 1 PARTIME	Year 4:	2 FULLTIME 1 PARTIME

2.B Aquaculture Site Details

Indicate type of site:

- (i) Land-based [ ]
- (ii) Marine-based [X]

2.C .Land-Based Site

(To be completed if appropriate)

(i) State species to be farmed:

(ii) State proposed system of culture e.g., pond, raceway, circular tank or other method:

(iii) Full address of proposed site including Townland and County:

(iv) Tonnage to be produced:

Year 1:		Year 2:		Year 3:		Year 4:	

(v) Proposed source of stock:

(vi) Name of river(s) supplying site with water:

(vii) Estimate drought flow in gallons per minute:

(viii) Is there a fall of 1.5 metres in the water level at this site or can this be obtained by damming the river without giving rise to flooding of your own or neighbour's land upstream of the site?

(ix) Area of proposed site (hectares):

(x) Details of services available on the site e.g., main road access, electricity:

(xi) Are there at present any possible sources of pollution upstream of the site, e.g. discharge from sewerage plant, farmyard, sheep dip facility, silage effluent, quarry, sandpit or factory? YES ☐ NO ☐

(xii) If yes, supply details: _____

(i)

Land-based Site (continued)

2.D The following must be supplied:

- - (i) Sketch of the layout of the site in relation to the river(s), road(s) and buildings;
- - (ii) Water quality Analysis Report, which should be drawn up in accordance with the parameters set out in Annex C of the Guidance Notes.

2.E The following conditions must be met in order to allow for consideration of licensing of land-based aquaculture:

(ii) - (i) the buildings and equipment must be put in place to the Department's satisfaction; an -(i) the operation must comply with Local Authority requirements.

2.F Marine-based Site(s)
(To be completed if appropriate)
Location -(i) Bay: BALLYNESS BAY

-(ii) County: DONEGAL

(iii) OS Map No: 24 COPY ENCLOSED

(iv) Site Co-ordinates COPY OF GPS CO-ORDINATES ENCLOSED

(v) Size (hectares):
2 HA

(vi) Species (common and scientific name):

T TAPES SEMIDECCUSATLUS (CLAMS) GASSOSTREA GIGAS (OYSTERS)

-Aquatic Plant(s)
-Any form of aquatic food suitable for the nutrition of fish

(vi) Method of culture (e.g., nets, ropes, tanks, trestles, etc.) WOODEN TRAYS + MESH

TRESTLES + BAGS

(vii) Drawings of structures to be used in method of culture should be enclosed.

(viii) If cages or tanks are proposed, state:

-(a) Number:

-(b) Type and shape:

-(c) Cubic Capacity:

-(d) Depth:

(ix) Proposed specific site locations (with reasons):

(x) Describe proposed purification facilities to be used, where appropriate:

Marine-based Site(s) (continued)

2.G Give details of any special requirements relating to the health of the proposed project and the wider matters of public health and safety:

SAMPLES TAKEN IN THE 90'S AND WATER QUALITY VERY GOOD.

SITE WILL BE SAMPLED FOR CLASSIFICATION

2.H Tonnage to be produced:

Species (To state)	Year 1:	Year 2:	Year 3:	Year 4:
OYSTERS	✓	10 TONNE	20 TONNE	40 TONNE
CLAMS	✓	✓	10 TONNE	25 TONNE

2.I Reasons for selection of site(s): GOOD QUALITY SEA WATER, GOOD SUBSTRATE FOR CLAM TRAYS AND OYSTER TRESTLES. GOOD GROWTH RATE WITH OYSTERS ON ADJACENT SITE

Note: The proposed access route to the site(s) from public road across tidal foreshore area Must be indicated on the OS map accompanying the application.

2.J Environmental Impact Statement (EIS).

A copy of an EIS, if required, should be enclosed with the application. The EIS should contain the information specified in Annex B of the Guidance Notes.

2.K Trial Licence.
(To be completed if appropriate)

Describe experimental or investigative nature of the proposed project:

[Use separate page if required – to be signed and dated]

B. MARKETING (continued)

3. Will the product be processed or packaged?

4. If yes, give details: _____

I/We hereby declare the information provided in Parts 1, 2 and 3 above to be true to the best of my/our knowledge. I/We enclose an application fee* of € 95.23 with this application.

Signature(s) of Applicant(s): Anthony Mc CAFFERTY

Date: 10/8/2011

*Preferred method of payment is by cheque or bank draft. The fee should be made payable to the Department of Agriculture, Fisheries and Food.

This form should be forwarded, with the required documents and application fee, to:

Aquaculture Licensing
Aquaculture & Foreshore Management Division
Clogheen
Clonakilty,
Co. Cork

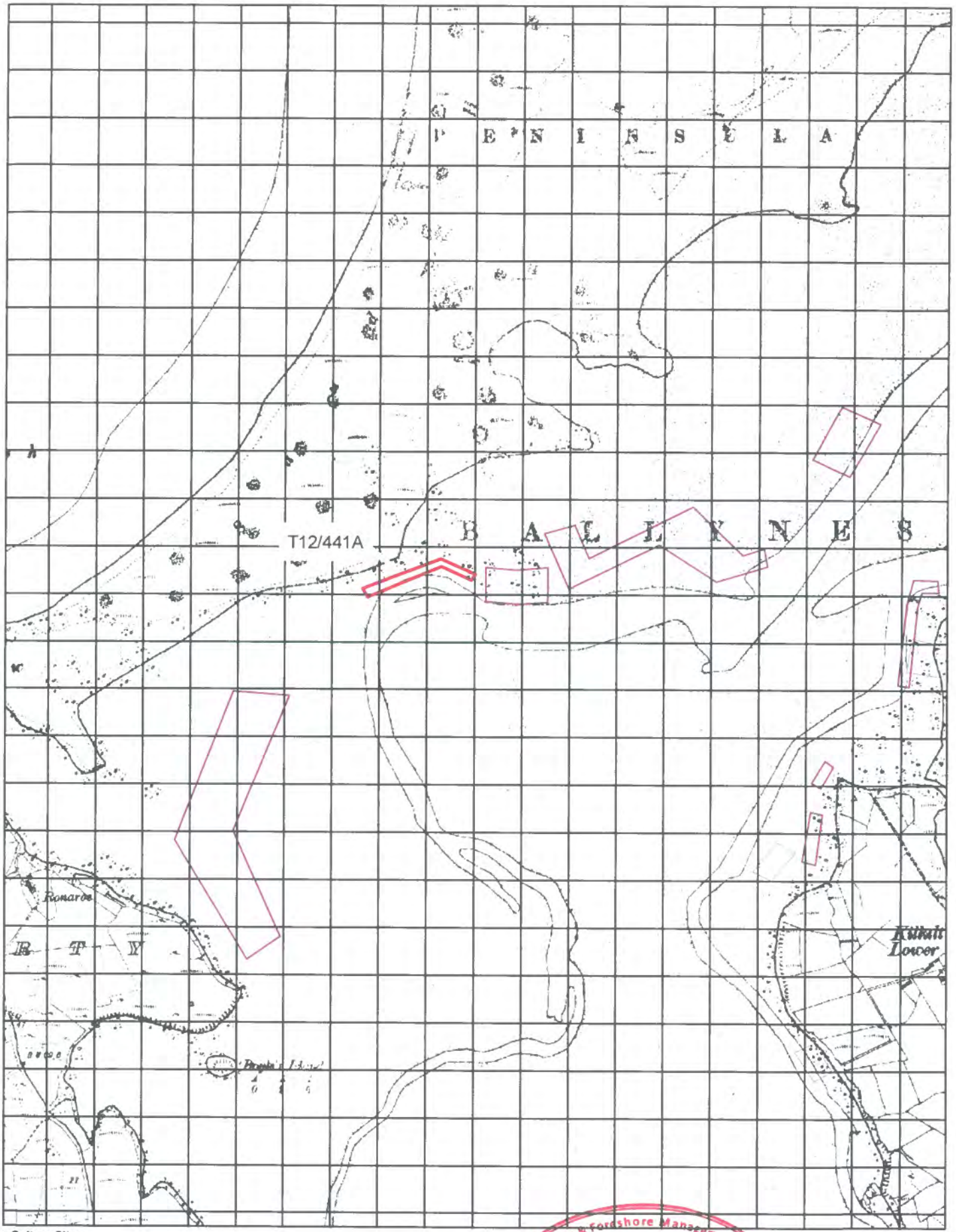
1 NO. SITE AT BALLYNESS BAY CO.DONEGAL

Co-ordinates & Area

Site T12/441A (0.408 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

190364, 433211 to Irish National Grid Reference point
190529, 433274 to Irish National Grid Reference point
190601, 433243 to Irish National Grid Reference point
190593, 433230 to Irish National Grid Reference point
190530, 433258 to Irish National Grid Reference point
190374, 433194 to the first mentioned point.



Aqua Culture Sites

<all other values>

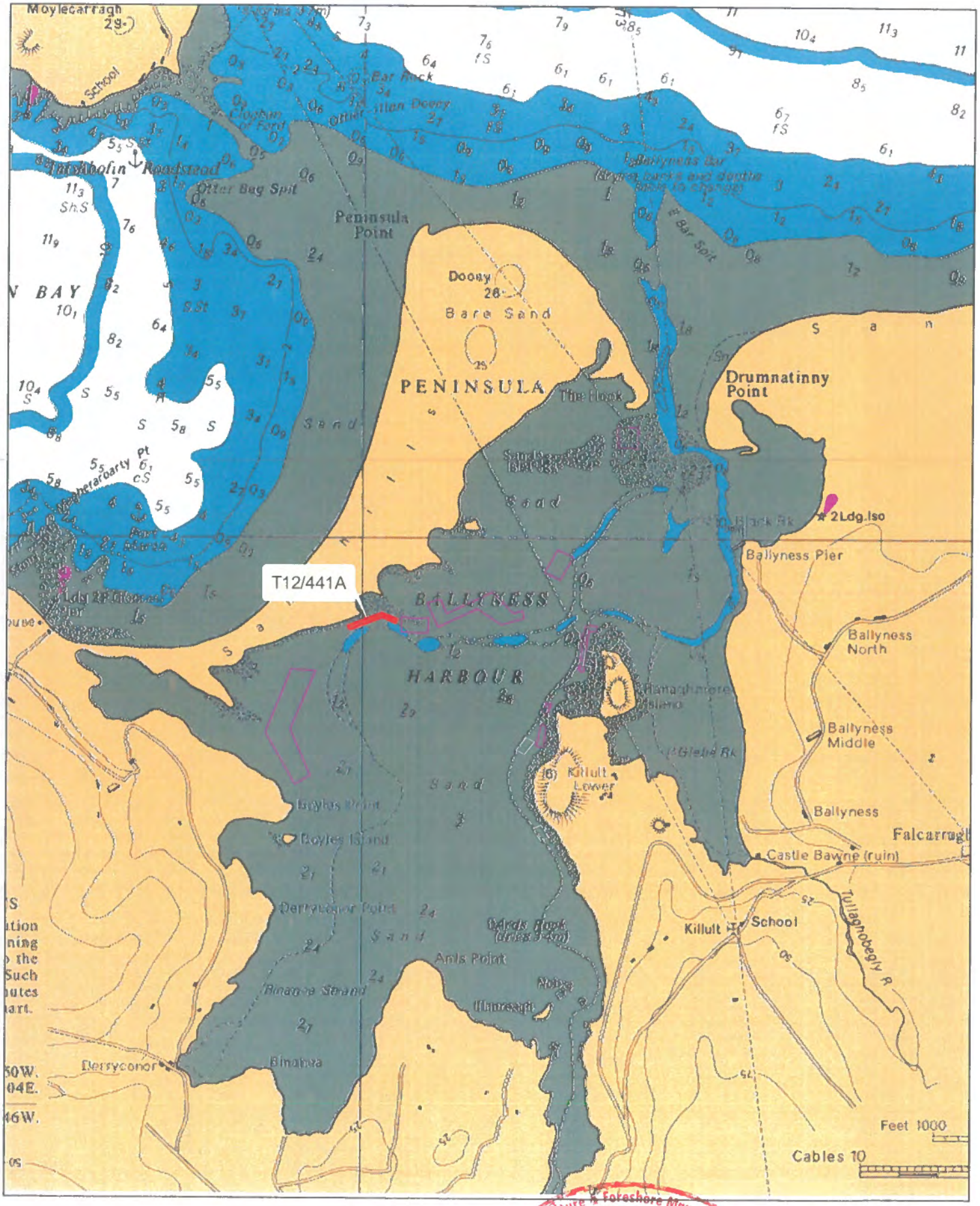
Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn
- 100 Meter Reference Grid

1:10,560

Site highlighted in red denotes application.

Department of
Agriculture,
Food and the Marine
An Roinn
Talmhaíochta,
Bia agus Mara



Aqua Culture Sites

<all other values>

Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn

1:24,000

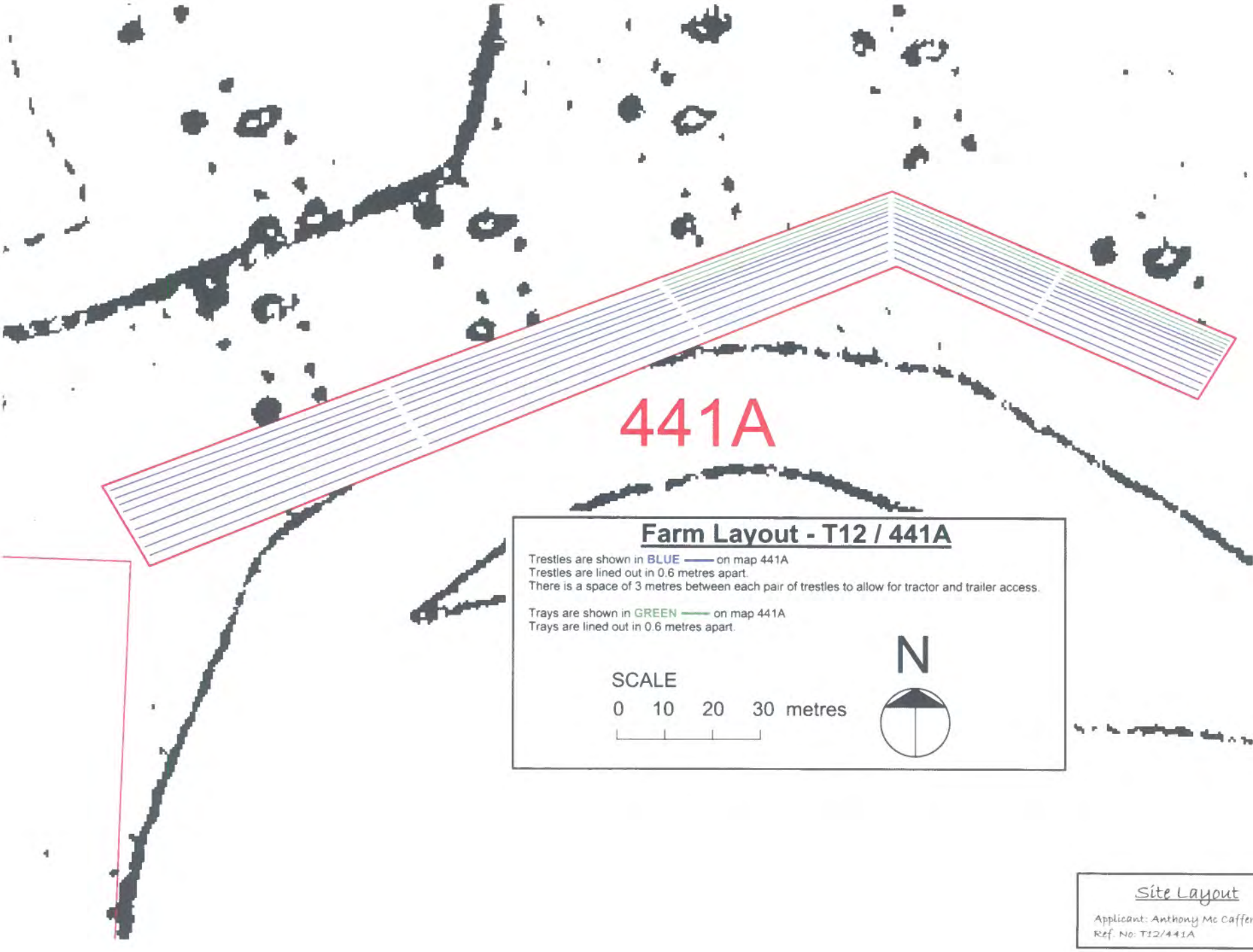
Site highlighted in red denotes application.

Part of Admiralty Chart No 2752-0
Not to be used for Navigation

Aquaculture & Foreshore Management Division
27 SEP 2013
Dept. of Agriculture, Food & the Marine

Department of Agriculture, Food and the Marine
An Roinn Talmhaíochta, Bia agus Mara


Proposed Access Map
to aquaculture site
T12 / 441A
Vehicle access shown in
GREEN
SCALE
0 100 200 metres
Port Marsh
Keadew
441A
Station
Bonarbe
Dogh's Island
(E.D. Gortahork)
1007
Access Route Map
Applicant: Anthony Mc Cafferty
Ref. No: T12/441A



Farm Layout - T12 / 441A

Trestles are shown in BLUE —— on map 441A
Trestles are lined out in 0.6 metres apart.
There is a space of 3 metres between each pair of trestles to allow for tractor and trailer access.

Trays are shown in GREEN —— on map 441A
Trays are lined out in 0.6 metres apart.

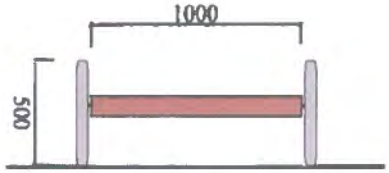
SCALE
0 10 20 30 metres

N

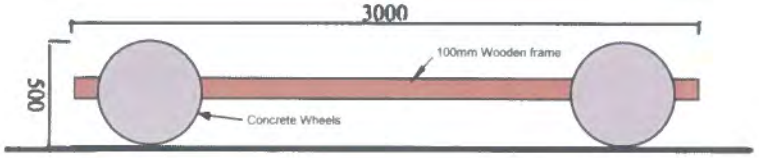
Site Layout

Applicant: Anthony Mc Cafferty
Ref. No: T12/441A

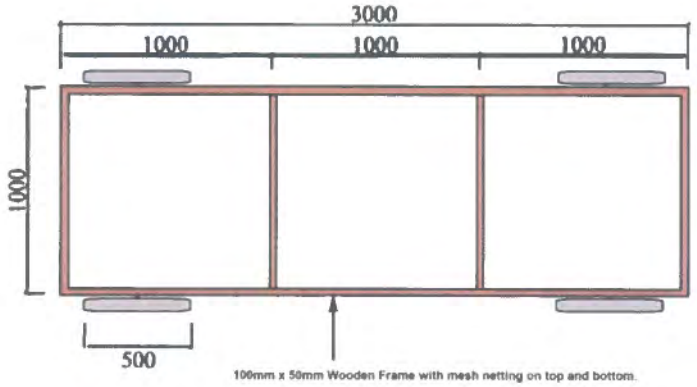
Tray Detail



Cross Section



Elevation



Plan

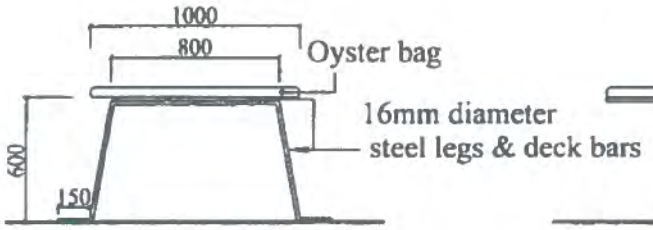
Tray Design

Applicant: Anthony Mc Cafferty

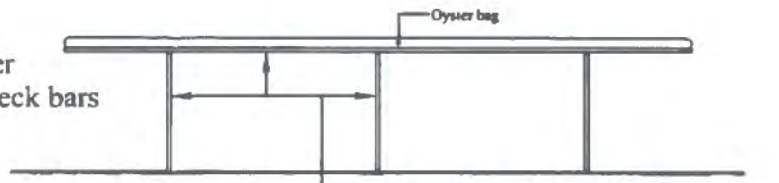
Ref. No: T12/441A

Scale 1:25

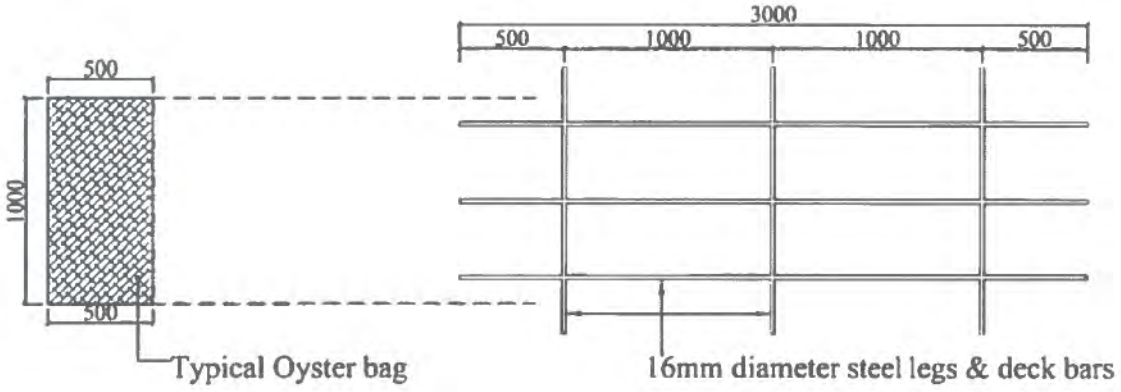
Trestle Detail



Cross Section



Elevation



Plan

Trestle Design

Applicant: Anthony Mc Cafferty

Ref. No T12/441A

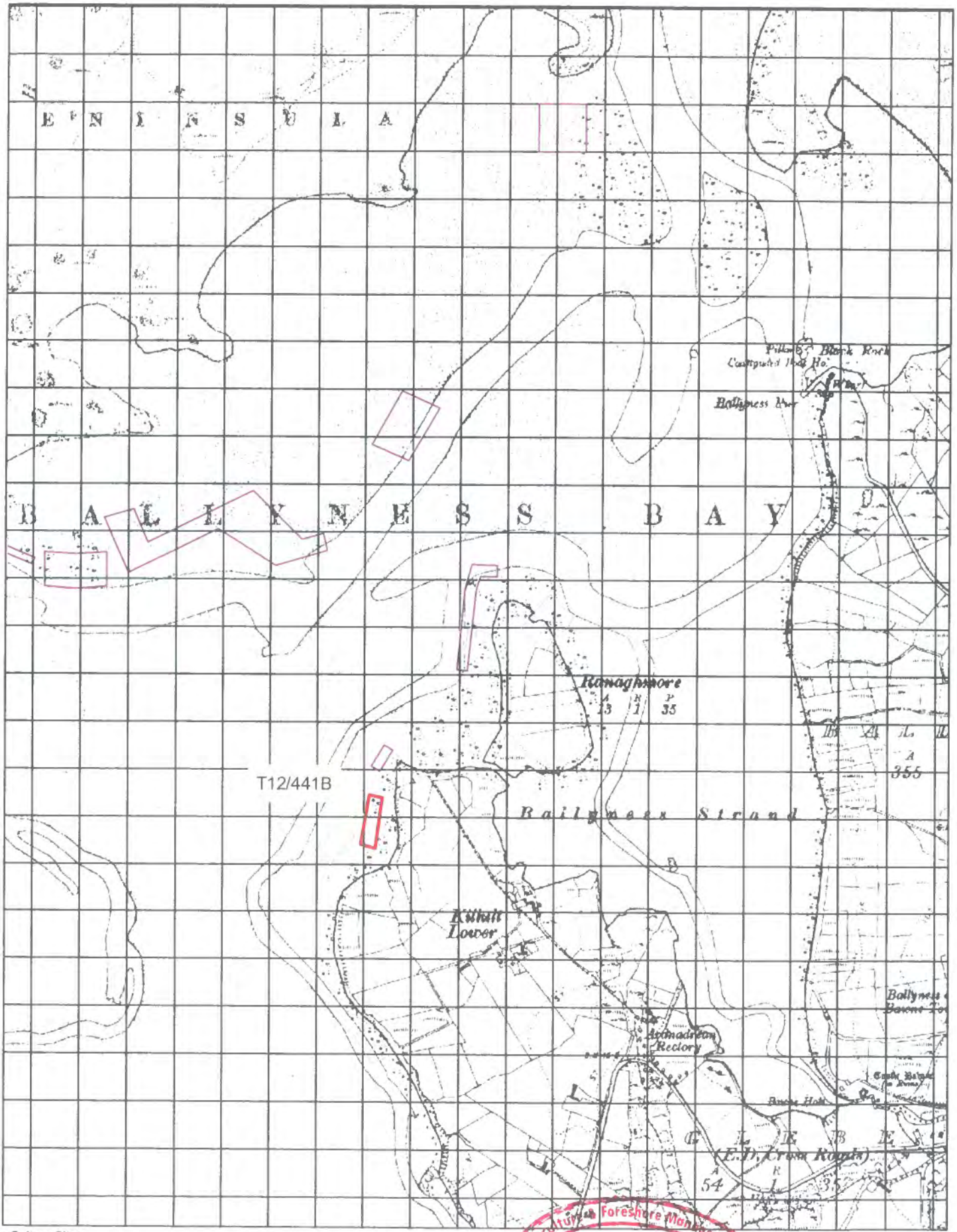
1 NO. SITE AT BALLYNESS BAY CO.DONEGAL

Co-ordinates & Area

Site T12/441B (0.408 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

191311, 432745 to Irish National Grid Reference point
191337, 432740 to Irish National Grid Reference point
191323, 432634 to Irish National Grid Reference point
191293, 432642 to Irish National Grid Reference point



Aqua Culture Sites

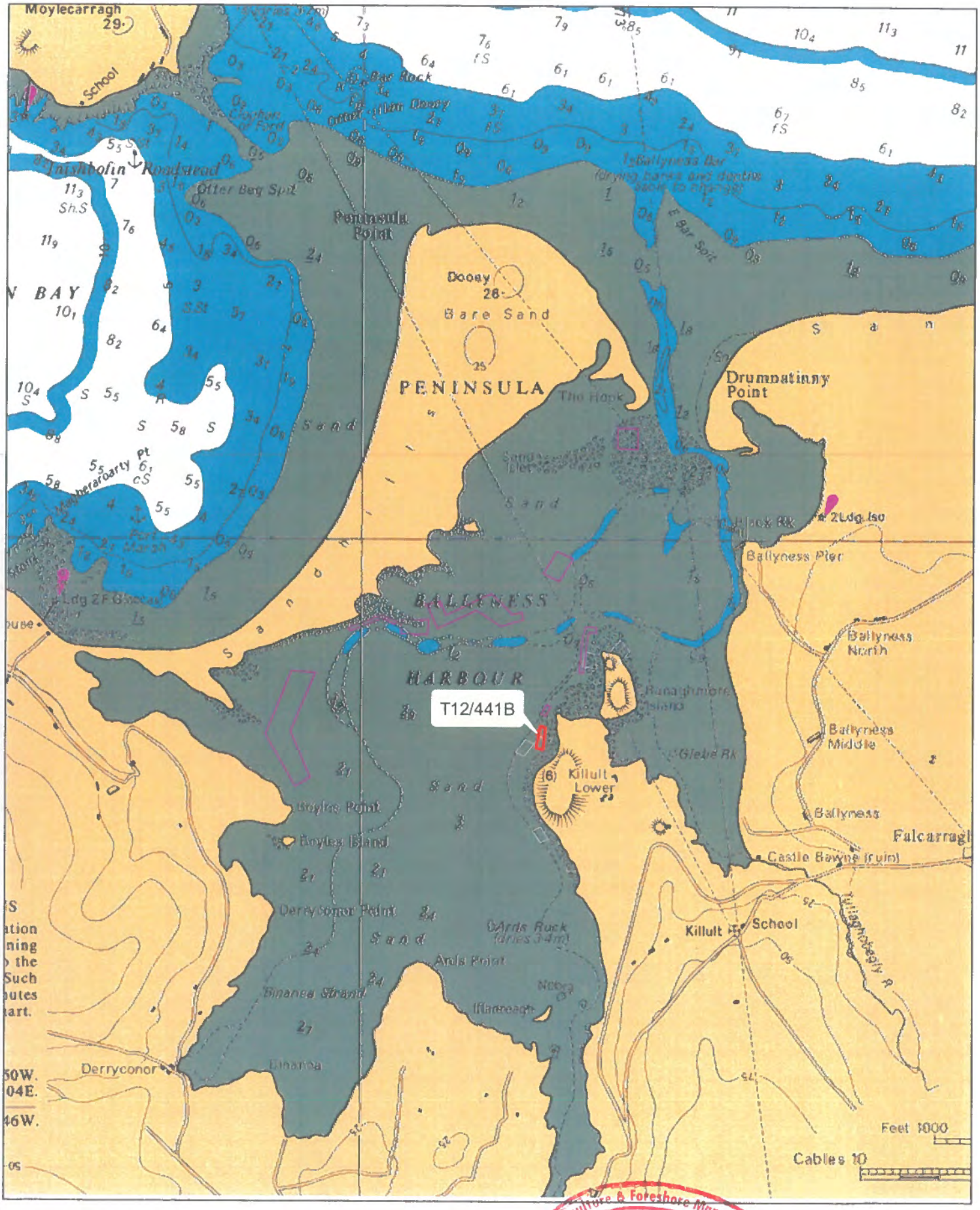
<all other values>

Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn
- 100 Meter Reference Grid

1:10,560

Site highlighted in red denotes application.



Aqua Culture Sites

<all other values>

Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn

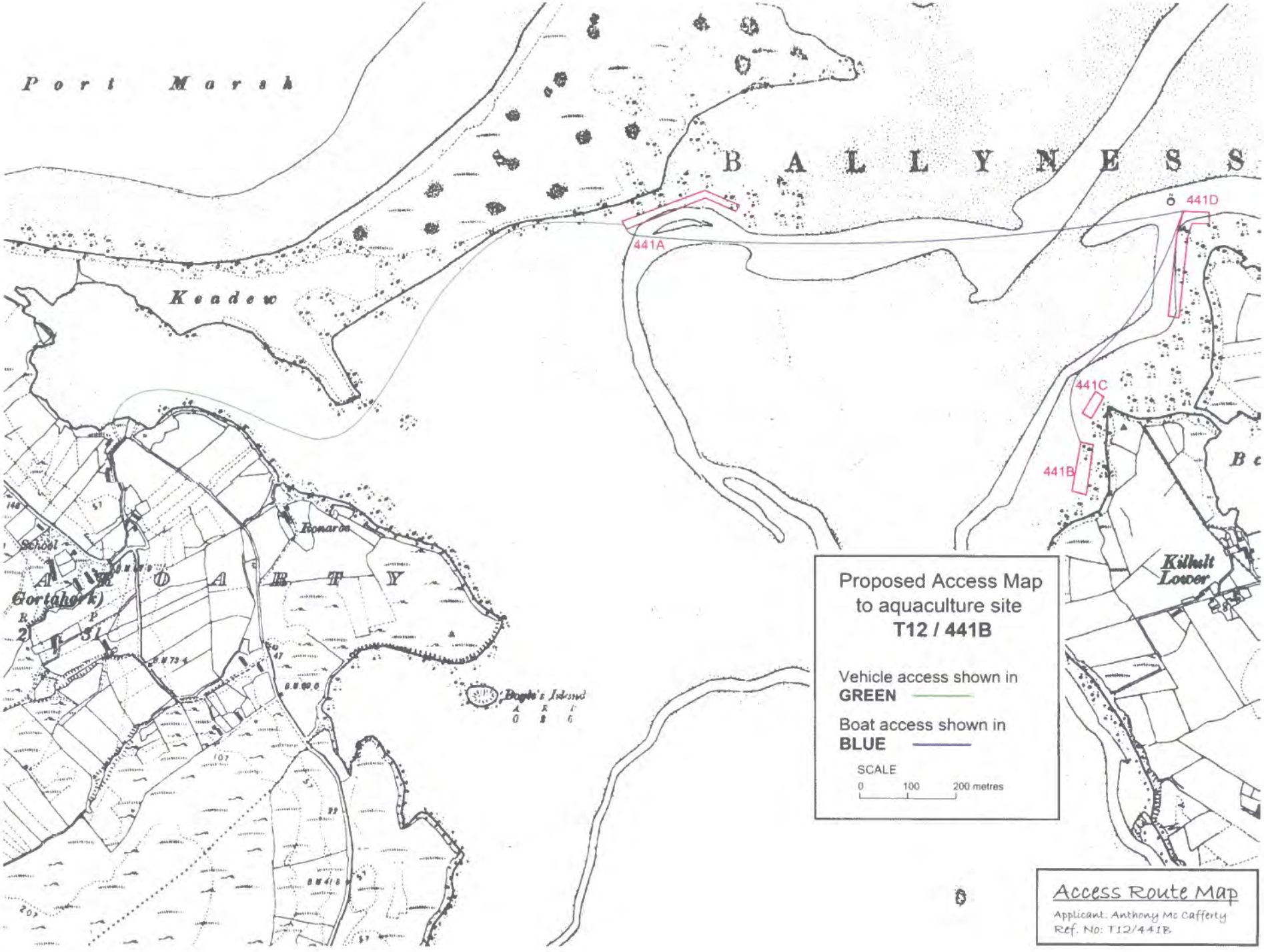
1:24,000

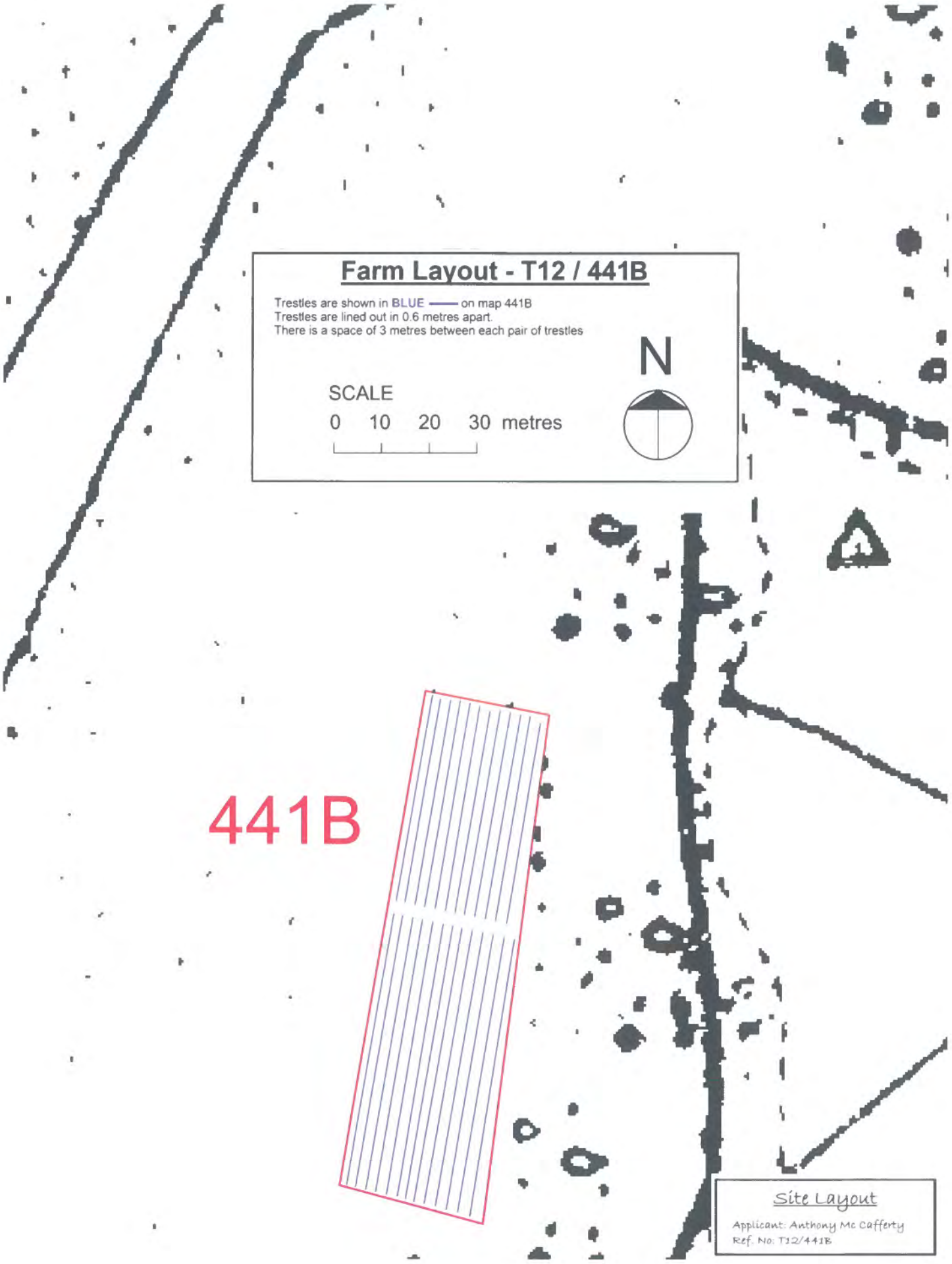
Site highlighted in red denotes application.

Part of Admiralty Chart No 2752-0
Not to be used for Navigation

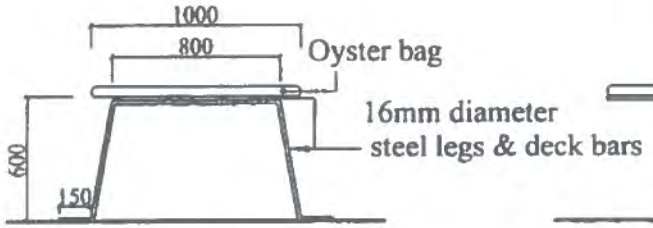
Aquaculture & Foreshore Management Division
27 SEP 2013
Dept of Agriculture, Food & the Marine

Department of Agriculture, Food and the Marine
An Roinn Talmhaíochta, Bia agus Mara

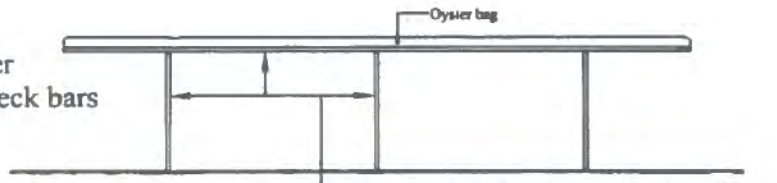

Port Marsh
BALLYNESS
Keadew
441A
441B
441C
441D
Bonaroe
School
Gortahork
Beagle's Island
Killult Lower
Proposed Access Map
to aquaculture site
T12 / 441B
Vehicle access shown in
GREEN
Boat access shown in
BLUE
SCALE
0 100 200 metres
Access Route Map
Applicant: Anthony Mc Cafferty
Ref. No: T12/441B


Farm Layout - T12 / 441B
Trestles are shown in BLUE —— on map 441B
Trestles are lined out in 0.6 metres apart.
There is a space of 3 metres between each pair of trestles
N
SCALE
0 10 20 30 metres
441B
Site Layout
Applicant: Anthony Mc Cafferty
Ref. No: T12/441B

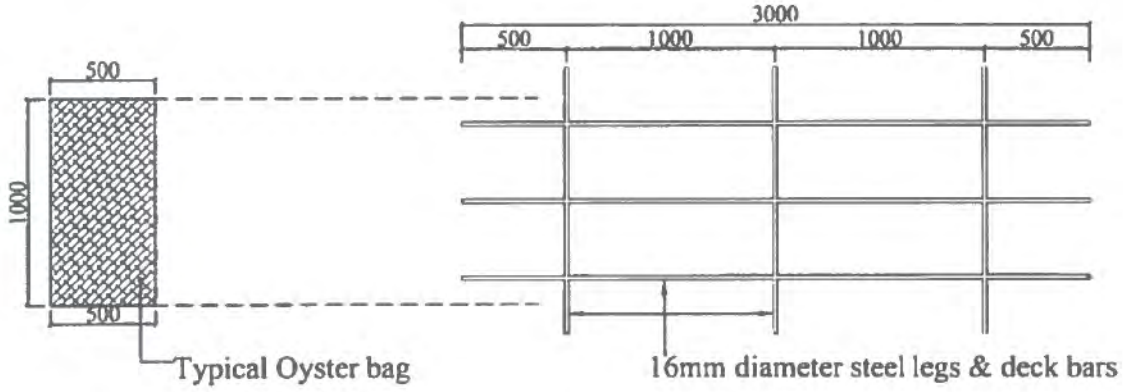
Trestle Detail



Cross Section



Elevation



Plan

Trestle Design

Applicant: Anthony Mc Cafferty

Ref. No. 12/441B

1 NO. SITE AT BALLYNESS BAY CO.DONEGAL

Co-ordinates & Area

Site T12/441C (0.113 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

191342, 432852 to Irish National Grid Reference point
191359, 432840 to Irish National Grid Reference point
191333, 432795 to Irish National Grid Reference point
191314, 432806 to Irish National Grid Reference point

Aqua Culture Sites

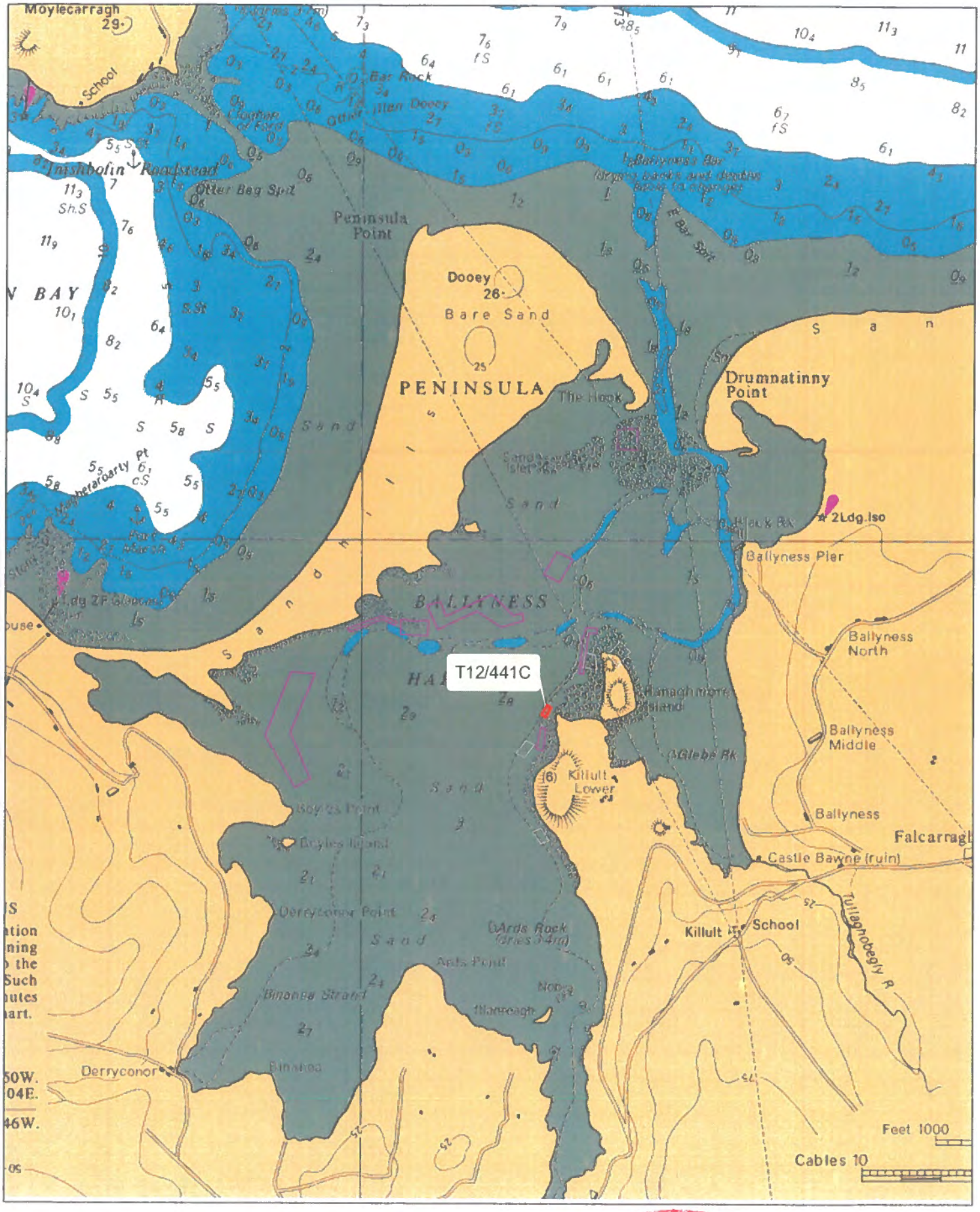
<all other values>

Site_Status

- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn
- 100 Meter Reference Grid

1:10,560

Site highlighted in red denotes application.



Aqua Culture Sites

<all other values>

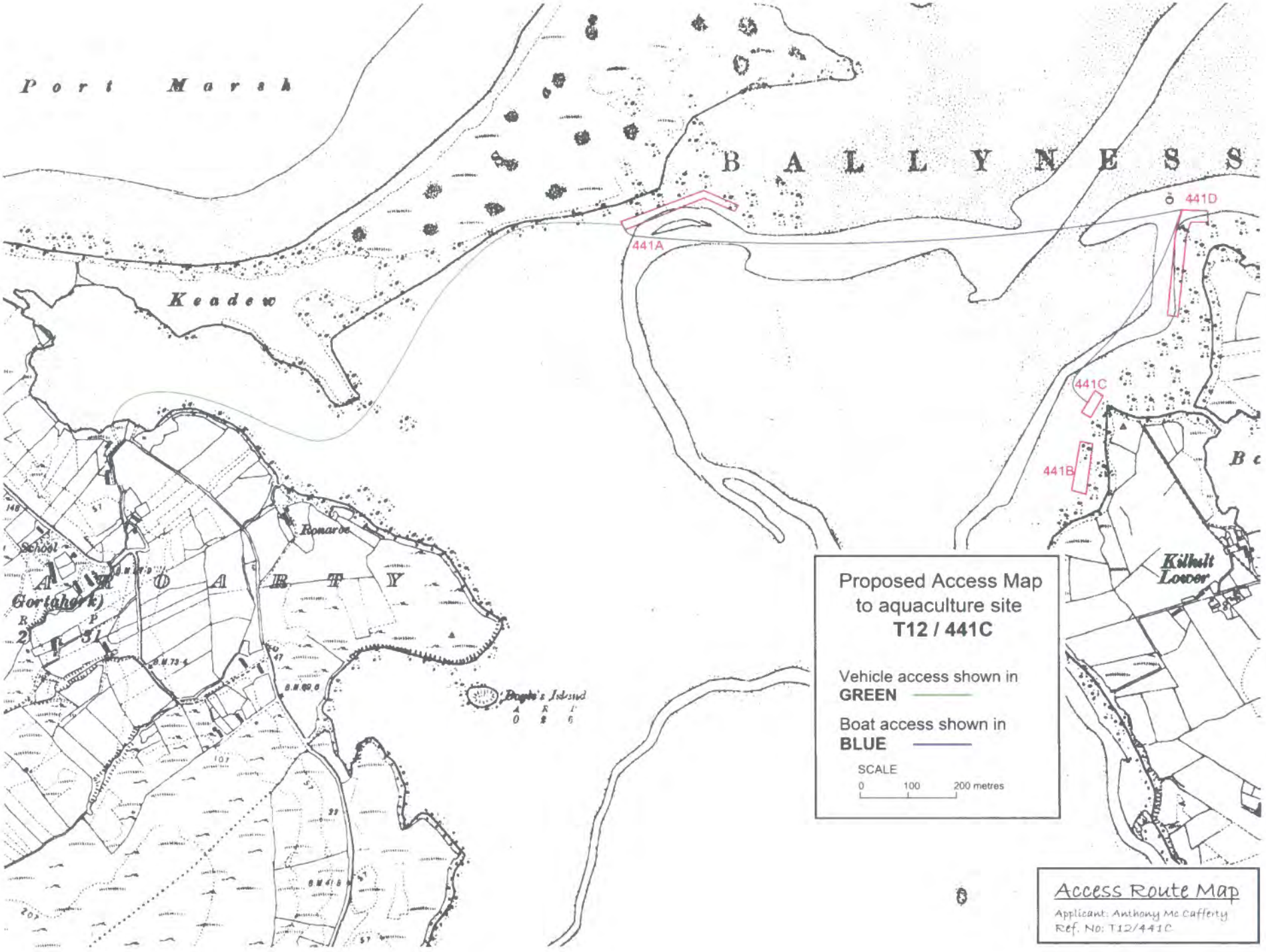
Site_Status

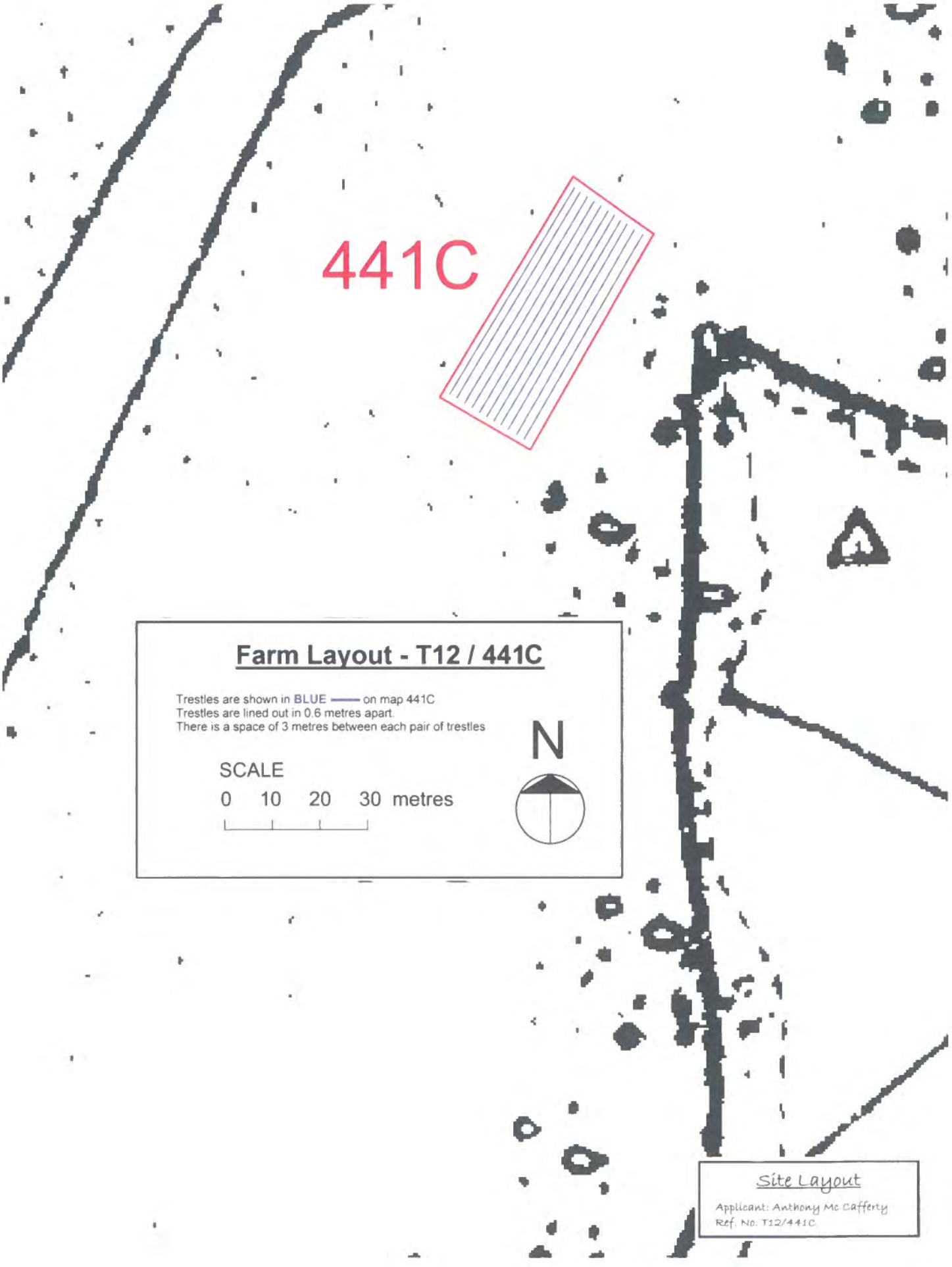
- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn

1:24,000

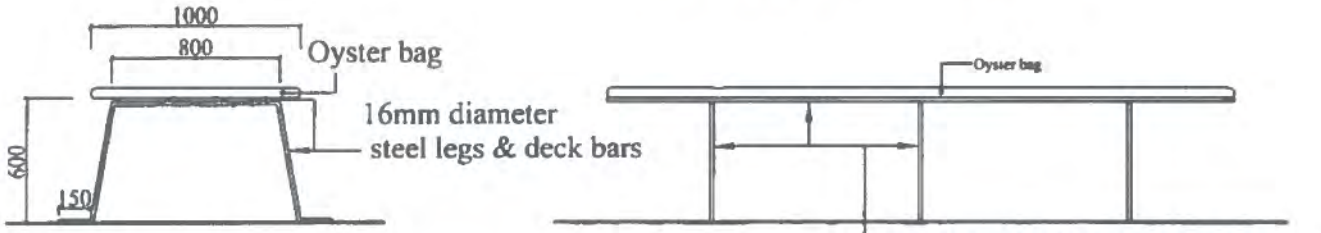
Site highlighted in red denotes application

Part of Admiralty Chart No 2752-0
Not to be used for Navigation


Port Marsh
BALLYNESS
Keadew
441A
441B
441C
441D
Kilbalt Lower
Proposed Access Map
to aquaculture site
T12 / 441C
Vehicle access shown in
GREEN
Boat access shown in
BLUE
SCALE
0 100 200 metres
Access Route Map
Applicant: Anthony Mc Cafferty
Ref. No: T12/441C

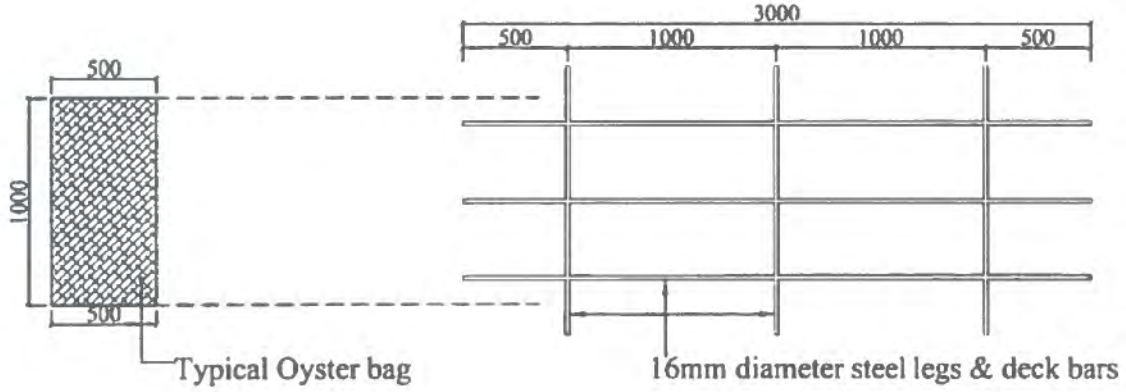

441C
Farm Layout - T12 / 441C
Trestles are shown in BLUE —— on map 441C
Trestles are lined out in 0.6 metres apart.
There is a space of 3 metres between each pair of trestles
SCALE
0 10 20 30 metres
N
Site Layout
Applicant: Anthony Mc Cafferty
Ref. No. T12/441C

Trestle Detail



Cross Section

Elevation



Plan

Trestle Design

Applicant: Anthony Mc Cafferty

Ref. No: T12/441C

1 NO. SITE AT BALLYNESS BAY CO.DONEGAL

Co-ordinates & Area

Site T12/441D (0.6 Ha)

The area seaward of the high water mark and enclosed by a line drawn from Irish National Grid Reference point

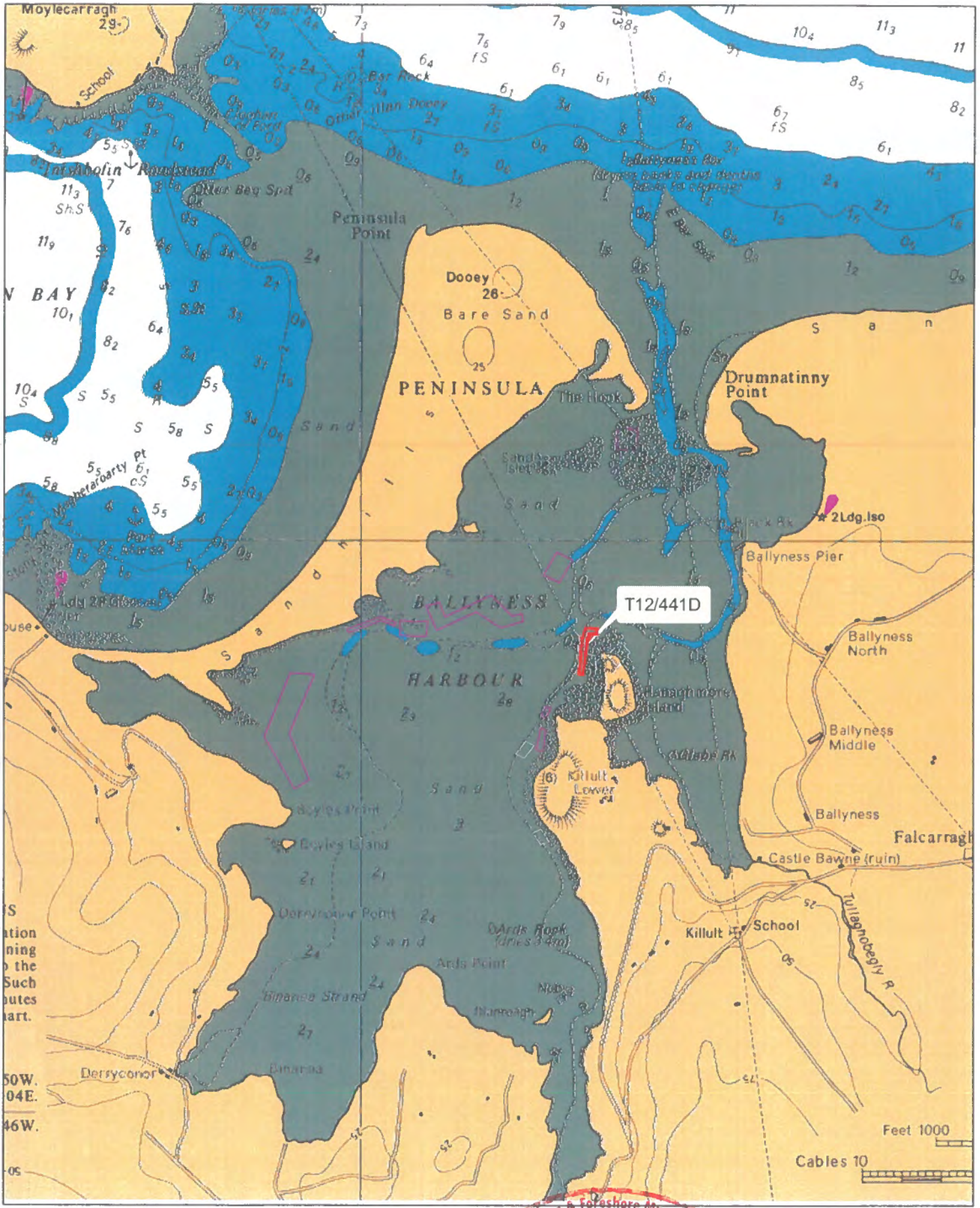
191524, 433233 to Irish National Grid Reference point
191577, 433231 to Irish National Grid Reference point
191578, 433207 to Irish National Grid Reference point
191542, 433207 to Irish National Grid Reference point
191533, 433178 to Irish National Grid Reference point
191515, 433008 to Irish National Grid Reference point
191493, 433011 to Irish National Grid Reference point
191510, 433182 to the first mentioned point.

Aqua Culture Sites
<all other values>

Site_Status
- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn
- 100 Meter Reference Grid

1:10,560

Site highlighted in red denotes application



Aqua Culture Sites
<all other values>

Site_Status
- Application
- Lapsed
- Licensed
- Refused
- Renewal
- Revoked
- Surrendered
- Withdrawn

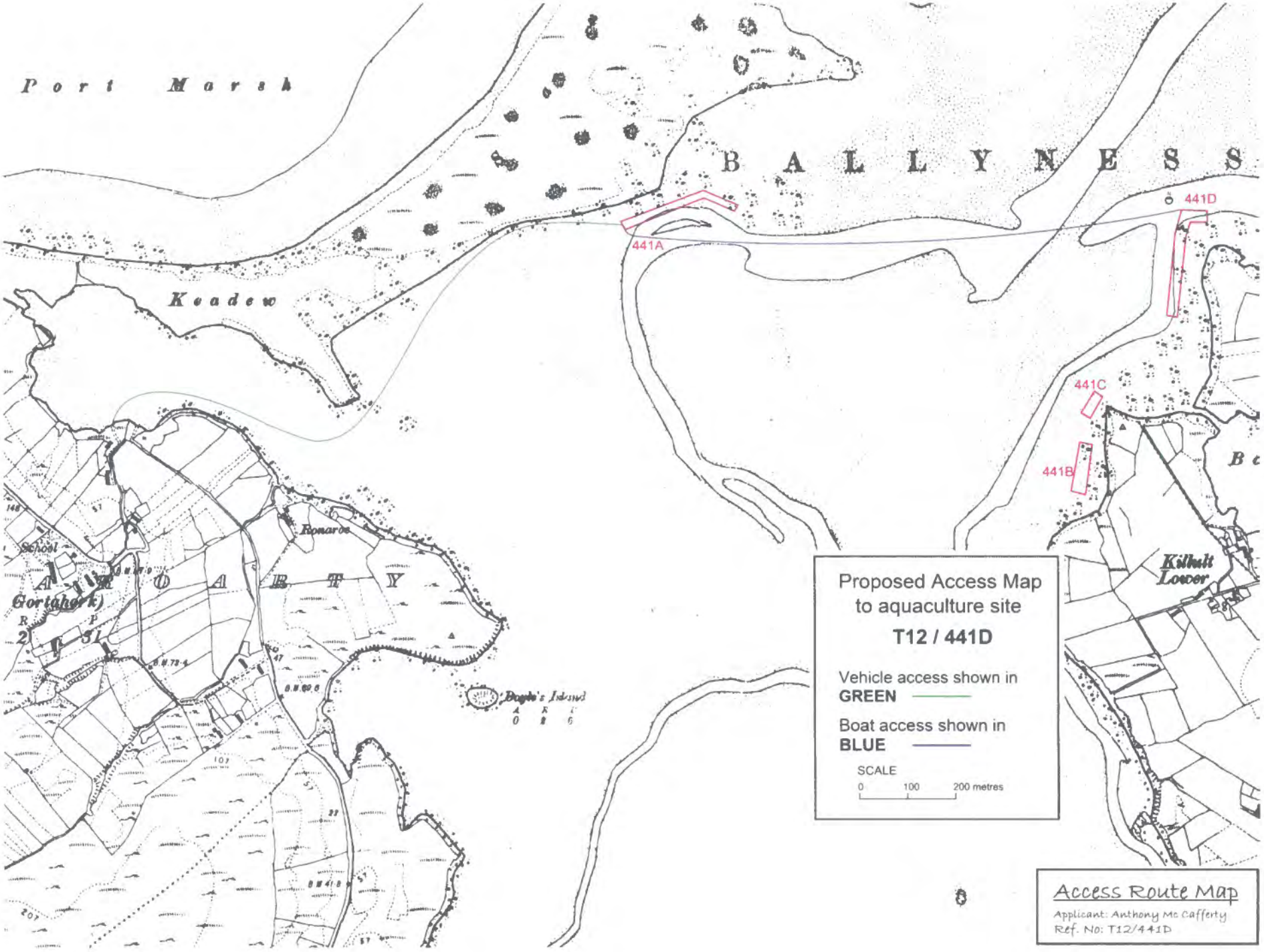
1:24,000

Site highlighted in red denotes application.

Part of Admiralty Chart No 2752-6
Not to be used for Navigation

Aquaculture & Foreshore Management Division
27 SEP 2013
Dept. of Agriculture, Food & the Marine

Department of Agriculture, Food and the Marine
An Roinn Talmhaíochta, Bia agus Mara


Port Marsh
BALLYNESS
Keadew
441A
441D
441C
441B
Ronaroe
School
Gortahork
Doyle's Island
Kilhilt Lower
Proposed Access Map
to aquaculture site
T12 / 441D
Vehicle access shown in
GREEN
Boat access shown in
BLUE
SCALE
0 100 200 metres
Access Route Map
Applicant: Anthony Mc Cafferty
Ref. No: T12/441D

Farm Layout - T12 / 441D

Trestles are shown in BLUE —— on map 441D
Trestles are lined out in 0.6 metres apart.
There is a space of 3 metres between each pair of trestles

Trays are shown in GREEN —— on map 441D
Trays are lined out in 0.6 metres apart.

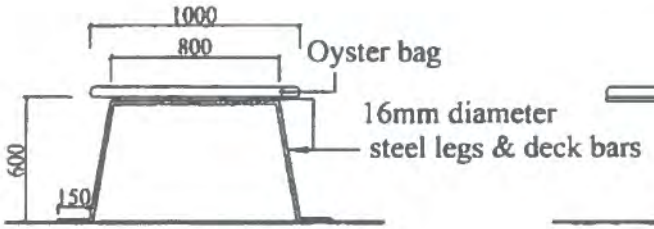
SCALE
0 10 20 30 metres

N

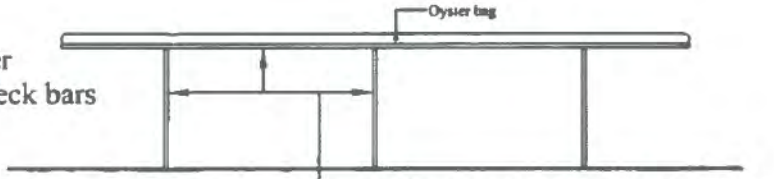
Site Layout

Applicant: Anthony Mc Cafferty
Ref. No: T12/441D

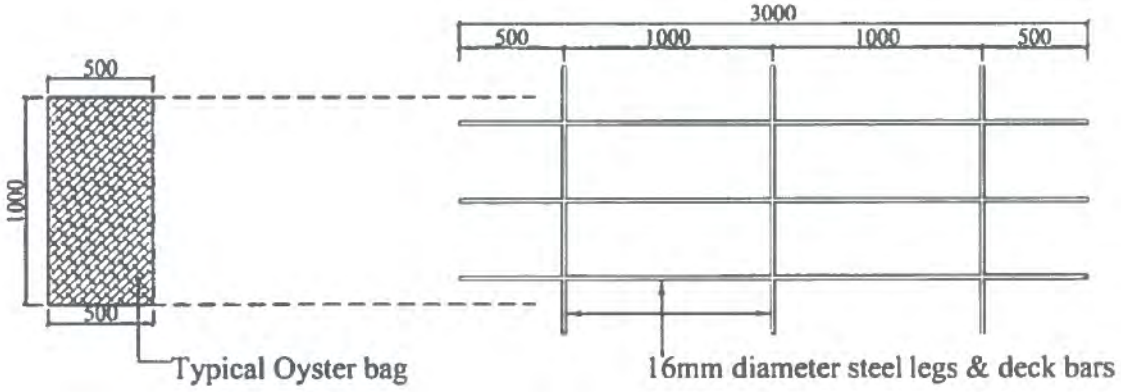
Trestle Detail



Cross Section



Elevation



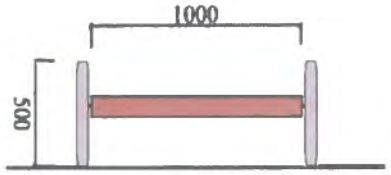
Plan

Trestle Design

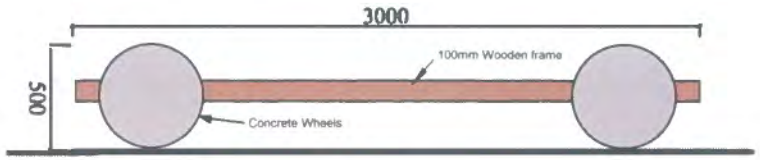
Applicant: Anthony Mc Cafferty

Ref. No: 12/441D

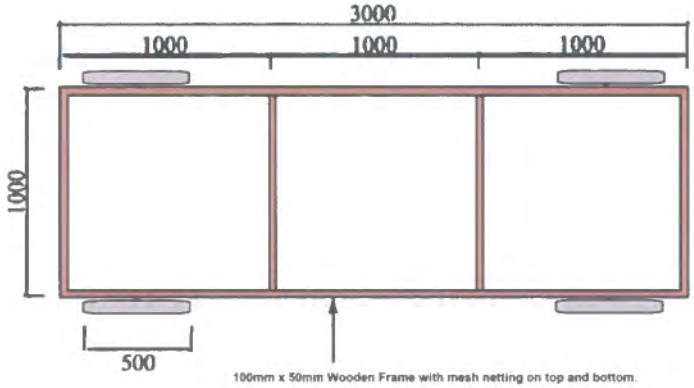
Tray Detail



Cross Section



Elevation



Plan

Tray Design
Applicant: Anthony Mc Cafferty
Ref. No: T12/441D

Final Appropriate Assessment Conclusion Statement by Licensing Authority in support of the Appropriate Assessment of Aquaculture in Ballyness Bay SAC (Site Code: 01090)

This Conclusion Statement outlines how it is proposed to licence and manage aquaculture activities in the above Special Area of Conservation (SAC) – Natura 2000 site - in compliance with the Habitats Directives. Aquaculture in this Natura Site will be licensed in accordance with the standard terms and conditions as set out in the aquaculture licence templates. These are available for inspection on the Department's website at
http://www.agriculture.gov.ie/seafood/aquacultureforeshoremanagement/aquaculturelicensing/
Furthermore, the licences will also incorporate specific conditions so as to accommodate Natura requirements, as appropriate, in accordance with the principles set out in this document.

An Article 6 (Habitats) Assessment and, specifically, an Appropriate Assessment report relating to aquaculture in the Ballyness Bay SAC has been prepared by the Marine Institute on behalf of the Department of Agriculture, Food and the Marine. The Appropriate Assessment considered the potential ecological impacts of aquaculture activities on Natura features in the SAC.

In addition to the Ballyness Bay SAC, there are a number of other SACs and SPAs proximate to the proposed aquaculture activities and a screening was carried out on their likely interaction with the proposed aquaculture activities in Ballyness Bay.

The information upon which the Appropriate Assessment is based is the definitive list of applications for aquaculture (as there are no existing licences) available at the time of assessment.

Existing and proposed Aquaculture Activity in Ballyness Bay SAC

Ballyness Bay is a large and very shallow estuarine complex, with extensive areas of sandflats which are exposed at low tide. No aquaculture operations currently operate in Ballyness Bay SAC. The Appropriate Assessment considered 20 applications for aquaculture operations which consisted of 14 for the cultivation of oysters only, 5 for the cultivation of oysters and clams and 1 for the cultivation of clams only. The number of sites being applied for has subsequently been reduced to 18 applications with two sites for oyster cultivation (T12/407A & T12/442A) withdrawn.

All applicants will use bag and trestle as the method of cultivation for oysters. Use of suspended wooden trays and ongrowing under mesh are the proposed methods of cultivation for clam. The profile of the aquaculture industry in the SAC, used in this assessment, was prepared by BIM and is derived from the list of licence applications received by DAFM and provided to the MI for assessment in August 2018.

SCREENING OF ADJACENT NATURA SITES FOR EX-SITU EFFECTS

In addition to the Ballyness Bay SAC there are four other SAC sites proximate to the proposed activities including Horn Head and Rinclevan SAC (000147), Gweedore Bay and Islands SAC (001141) and the Tory Island Coast SAC (002259).

It was deemed that there are no *ex-situ* effects on Qualifying Features of the Tory Island Coast SAC therefore they were screened out from further assessment.

It was also deemed that there are no *ex-situ* effects on the Qualifying habitat Features in the Gweedore Bay & Islands SAC and the Horn Head and Rinclevan SAC. However, as the Gweedore Bay & Islands SAC is c. 3km from the Ballyness Bay SAC *Lutra lutra* (Otter) may migrate into the Ballyness Bay SAC and could interact with aquaculture activities this was carried forward for further assessment. Also as the Horn Head and Rinclevan SAC is adjacent to the Ballyness Bay SAC, Grey seal may migrate into the Ballyness Bay SAC and could interact with aquaculture activities therefore this was also carried forward for further assessment.

In addition, there are 7 SPA sites in the vicinity of Ballyness Bay SAC. The characteristic features of these sites were identified and a preliminary screening was carried out on the likely interaction with aquaculture activities based primarily upon the likelihood of spatial overlap. No spatial overlap was identified and the SPAs were excluded from further analysis.

CONSERVATION OBJECTIVES FOR BALLYNESS BAY SAC

The Conservation Objectives for the Qualifying Interests for the SAC were prepared by NPWS (NPWS 2014a). The natural condition of the designated features should be preserved with respect to their area, distribution, and extent and community distribution. Habitat availability should be maintained for designated species and human disturbance should not adversely affect such species.

None of the proposed aquaculture activities overlaps or is likely to interact with the following features or species, and, therefore, the following habitats and species were excluded from further consideration in the appropriate assessment:

- Embryonic shifting dunes [2110]
- Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]
- Humid dune slacks [2190]
- *Vertigo geyeri* (Geyer's Whorl Snail) [1013]

Furthermore, all proposed aquaculture application sites do not overlap with the Annex I habitat Estuaries [1130] and this habitat was also excluded from further analysis.

After an initial screening exercise the following qualifying habitats/species were considered subject to potential disturbance and, therefore, carried further in the assessment:

- 1140 Mudflats and sandflats not covered by seawater at low tide
- 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)

The constituent communities of habitat 1140 considered in the appropriate assessment were coarse sediment to sandy mud with oligochaetes and polychaetes community complex and Mobile sand community complex.

ASSESSMENT OF THE EFFECTS OF AQUACULTURE PRODUCTION ON THE CONSERVATION OBJECTIVES FOR HABITAT FEATURES IN THE BALLYNESS BAY SAC.

A full assessment was carried out on the likely interactions between proposed culture operations and the Annex 1 habitat (2130) Fixed coastal dunes with herbaceous vegetation (grey dunes) and the Annex 1 habitat (1140) Mudflats and sandflats not covered by seawater at low tide. It was found that it is unlikely that the activities proposed will reduce the overall extent of permanent habitat within the feature (1140) Mudflats and sandflats not covered by seawater at low tide. The habitat area is likely to remain stable.

Based upon the scale of spatial overlap of proposed intertidal aquaculture activities (including access route activity) and the relatively high tolerance levels of the habitats and associated species, the general conclusion is that proposed intertidal culture activities are non-disturbing to the Qualifying Interest - 1140 and its constituent community types.

Overlap between an access route and coastal habitat designated as Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] occurs from Magheraroarty Pier. The access route follows an established track through the dunes system at Magheraroarty. While it is acknowledged that the access routes proposed will follow (for the most part) existing paths (currently subject to vehicular and pedestrian traffic), the licensing of aquaculture activity at this site could lead to additional risk of erosion and degradation of this dune habitat [2130]. The risk of damage from vehicular traffic to dune habitat (2130) in Ballyness Bay therefore, cannot be discounted.

Intertidal Clam Culture

It is proposed to culture the Manila Clam (*Ruditapes philippinarum*) on-bottom in intertidal areas. Clam culture may result in more chronic and long-term changes in community composition which were considered during the assessment process. High density clam culture may result in exclusion of native fauna and build-up of sedimentary material as a consequence of the netting. In addition, the harvest method employed using modified dredges attached to tractors is considered highly disturbing to all sedimentary marine community types.

Intertidal Oyster Cultivation

Published literature (Forde *et al*., 2015; O'Carroll *et al.,* 2016) suggests that the presence of bags on trestles is considered non-disturbing to the community type Coarse sediment to sandy mud with oligochaetes and polychaetes community complex. The sensitivity of the community type Mobile sand community complex is unknown given the wide variation in species composition and sedimentary characteristics that comprise this community type (NPWS 2014b). While some characteristics of this community type match those described and investigated in Forde et al (2015) and O'Carroll et al (2016) others are quite different. In particular, areas where there are very 'soft' mobile sands with impoverished communities would appear to be sensitive to the placement of trestles and even foot traffic among the trestle rows. On this basis, it is assumed that intertidal shellfish culture has the potential to disturb this community type.

The access routes used in intertidal areas, presumably by virtue of persistent compaction of the sedimentary habitats, are considered disturbing (De-Grave *et al.,* 1998; Forde *et al.,* 2015; O'Carroll *et al*., 2016). For the Qualifying Interests 1140 the spatial overlap of the access routes with the

constituent community type of Mobile sand community complex is 0.59% and for Coarse sediment to sandy mud with oligochaetes and polychaetes community complex is 1.2%

Introduction of non-native species

Oyster culture may present a risk in terms of the introduction of non-native species as the Pacific oyster (*Crassostrea gigas*) itself is a non-native species. The risk of Pacific oysters naturalising in Ballyness Bay cannot be discounted.

While there is minimal risk associated with the introduction of hitchhiker species with hatchery reared oyster seed; a risk of alien species introductions presents if '½-grown' or 'wild' seed originating from another jurisdiction (e.g. Britain, France) is introduced to the sites. However, it is noted that hatchery seed will only be used in the bay so the risk posed by the transfers of other sources of stock can be discounted.

In relation to the Manila clam (*Ruditapes philippinarum*), this species has been in culture in Ireland since 1984 and, to the best of our knowledge, no recruitment in the wild has been recorded.

ASSESSMENT OF THE EFFECTS OF AQUACULTURE PRODUCTION ON THE CONSERVATION OBJECTIVES FOR OTTER *LUTRA LUTRA (*OTTER*)* IN THE GWEEDORE AND ISLANDS SAC.

Shellfish culture operations are likely to be carried out in daylight hours. The interaction with the otter is likely to be minimal given that otter foraging is primarily crepuscular. It is unlikely that these culture types pose a risk to otter populations from the Gweedore Bay and Islands SAC.

On the basis of location and timing of activities, the proposed levels of licensed shellfish culture are considered non-disturbing to otter conservation features in the Gweedore Bay and Islands SAC.

ASSESSMENT OF THE EFFECTS OF AQUACULTURE PRODUCTION ON THE CONSERVATION OBJECTIVES FOR *HALICHOERUS GRYPUS* (GREY SEAL) IN THE HORN HEAD AND RINCLEVAN SAC.

All of the proposed aquaculture production activities within Ballyness Bay SAC are confined around low water and are located in shallow and sheltered areas. All of the proposed aquaculture production activities within Ballyness Bay SAC are >10km from the documented breeding, moulting and resting sites of the grey seal in the Horn Head and Rinclevan SAC and therefore, are unlikely to impact on the attributes relating to the site.

Notwithstanding, seals have been observed to haul-out within Ballyness Bay in particular, on a large sand bank in the centre of the Bay. Given that there are currently no aquaculture operations in Ballyness Bay, it is not certain that the introduction of significant levels of aquaculture operations will not impact on the site use by these Annex II species, in particular at those locations proximate to the haul-out location. Therefore, the risk posed by the proposed aquaculture activities in Ballyness Bay to seal conservation features cannot be discounted.

ASSESSMENT OF IN-COMBINATION EFFECTS OF AQUACULTURE, FISHERIES AND OTHER ACTIVITIES

There are no fishing activities within Ballyness Bay SAC and therefore, there are no likely in-combination effects.

Pollution Pressures

There are a number of activities which are terrestrial in origin that might result in impacts on the conservation features of the Ballyness Bay SAC. Primary among these are point source discharges from domestic sewage outfalls distributed along the harbour and municipal urban waste water treatment plants. The pressure derived from these point sources may impact upon levels of dissolved nutrients, suspended solids and some elemental components e.g. aluminium in the case of water treatment facilities.

Conclusion

Pressures resulting from aquaculture activities are primarily disturbance to sediments as a consequence of compaction of sediment along access routes and preparation of sites and harvest of clam sites. It was, therefore, concluded that given the pressure resulting from point discharge locations such as the urban waste-water treatment and/or combined sewer outfalls would likely impact on physico-chemical parameters in the water column any in-combination effects with aquaculture activities are considered to be minimal.

OVERALL APPROPRIATE ASSESSMENT FINDINGS

The Appropriate assessment makes the following conclusions in relation to interactions with shellfish culture:

- Based upon the scale of spatial overlap of proposed intertidal aquaculture activities (including access route activity) and the relatively high tolerance levels of the habitats and associated species, the general conclusion is that proposed intertidal culture activities are non-disturbing to the Qualifying Interests 1130 and 1140 and their constituent community types.

  Notwithstanding the conclusions noted in relation to Annex 1 habitat 1140, it should be noted that the nature of the community type, Mobile sand community complex is such that there are likely to be locations where the sediments are extremely mobile (and soft) thus making them unsuitable for aquaculture operations.

- The report highlights the overlap of access routes with the habitat - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] which does appear to present a risk of erosion and habitat degradation. Specifically, the risk arises from the additional traffic likely to occur on existing tracks as a result of the need to access the sites.

- In relation to interactions between aquaculture operations and seal use of the site, the risk of disturbance cannot be discounted. The Bay, to date, has had very little aquaculture operations and therefore, the seals will have had little opportunity to habituate to the activities. Also of note, where there is no specific barrier to access (e.g. tidal channel), the seals are more likely to be disturbed.

BIRDS/HABITATS ISSUES RAISED DURING THE AQUACULTURE LICENSING PROCESS FOR SITES IN THIS SAC/SPA

A number of issues relevant to the Appropriate Assessment were raised during the aquaculture licensing consultation process. These issues have been considered by the Department and its scientific advisors and are addressed below:

1. Traffic disturbance
Comment:-

"- The increased traffic which would result from licensing of all the aquaculture applications poses a serious risk to fixed coastal dune habitats [2130]

- *A licence condition requiring strict adherence to the identified access routes over intertidal and nearshore habitat in order to minimise species/habitat disturbance will be included.*

- this condition will be entirely ineffective and does not address the risk posed. The risk arises due to the level of traffic, and has nothing to do with adherence to the existing track.

- Before these sites can be licenced the relevant authority must be certain that there will be no significant impact on the qualifying habitat, and it is obvious from the AA report that the licensing authority do not currently possess the necessary information to reach this conclusion. As such we submit that licencing cannot proceed without contravening Article 6(3) of the Habitats Directive.

- the licensing authority cannot proceed with licensing any of the proposed aquaculture applications without contravening both the Habitats Directive and the Aarhus convention."

Response:-

The Department in conjunction with its scientific and engineering advisors have considered the comments and as outlined in the draft conclusion statement have also considered alternative routing The alternative routing as stated in the draft conclusion statement will avoid the overlap of proposed access routes with Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]. Access routing from the south of the Bay rather than from the grey dune [2130] area represents an addition of approximately 1 km of access track (or 0.85 ha) on the Qualifying Interest 1140 (Mudflats and sandflats not covered by seawater at low tide) and on the community type Mobile Sand Community Complex. This represents total aquaculture access related coverage of 0.81% of the Qualifying Interest 1140 and 0.74% of the Mobile Sand Community Complex. Taking account of these revised values and habitat utilisation by the aquaculture sites themselves, the total spatial overlap will be below the threshold for disturbance of 15%.

It has been decided following these consultations, that the new route as shown in Figure 1.1 below which was assessed and referenced in the draft conclusion statement will be implemented in relation to all sites to be licensed on the west side of the Bay, that had proposed routes which overlapped with the grey dunes habitat .

As stated all licences granted will contain a condition requiring strict adherence to the identified access route in order to minimise species/habitat disturbance.

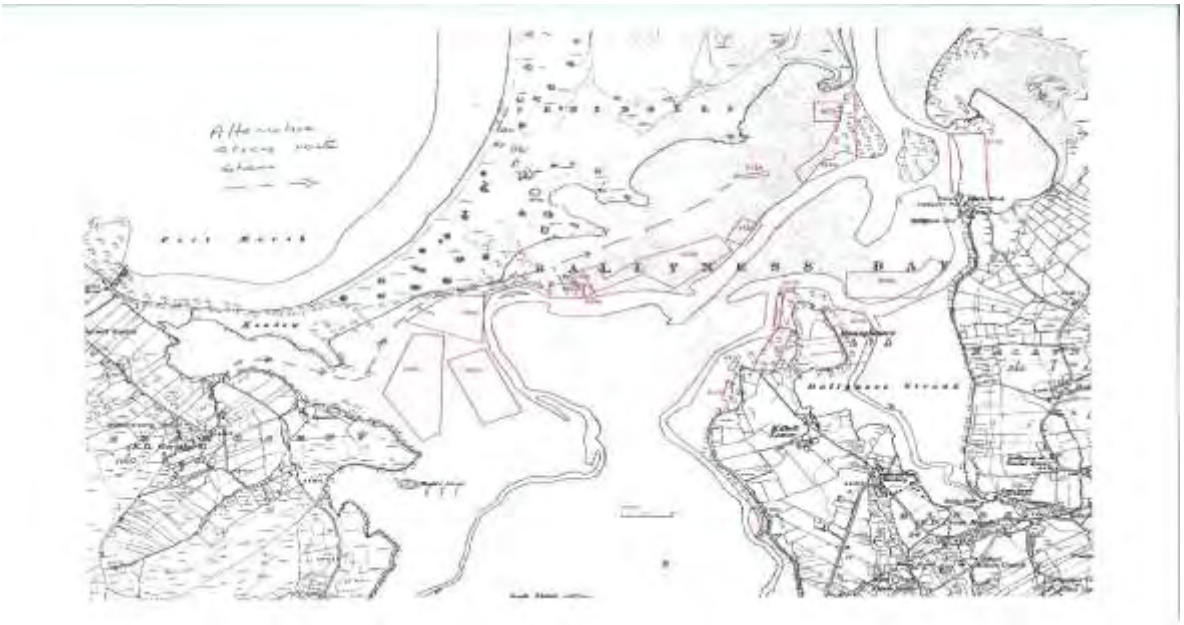


Figure 1.1

2. Grey Seals

Comments:-

"- The introduction of aquaculture into Ballyness Bay poses a serious risk to Grey Seals.

- while we welcome the decision to refuse licensing of site T12-508A, which is closest to the seal haul out area, the risk to the Grey Seals applies to the licensing of all of the aquaculture applications, as outlined above 'i t is not certain that...significant levels of aquaculture operations will not impact on the site use by these Annex II species.

- while site T12-508A posed the greatest risk, the conclusions reached in the AA document indicate that it is the aquaculture activity in general which poses a risk, and this cannot be discounted."

Response:-

It must be noted that the use of the term 'serious risk' was not used in the AA report. While it is noted that the species observed at the haul-out location in Ballyness Bay was not defined and could have been the Common Seal or the Grey Seal the conclusions of the report are based upon experience at other seal locations. Where seals do not have to share space (i.e., sandbank) with other activities, there tends to be acclimation and less likelihood of disturbance. It is considered the greatest risk will originate from activities at the proposed aquaculture site identified. The management measures proposed are appropriate.

3. Mobile sand community

Comments:-

"The sensitivity of the community type Mobile sand community complex is unknown given the wide variation in species composition and sedimentary characteristics that comprise this community type. In particular, areas where there are very 'soft' mobile sands with impoverished communities would

appear to be sensitive to the placement of trestles and even foot traffic among the trestle rows. On this basis, it is assumed that intertidal shellfish culture has the potential to disturb this community type."

- highlight that these habitats are by definition mobile, and mapping of these will be subjective and unreliable considering the habitats are in constant flux. As such, a large degree of uncertainty remains, and licencing of oyster trestles within a habitat which is constantly in flux puts this community type at risk of disturbance.
- without the necessary degree of certainty of suitability of these sites for supporting oyster trestles, the licencing authority should not proceed with licencing in this Bay.

Response:-
The quote attributed to the AA Report above is incomplete and should read:- "The sensitivity of the community type Mobile sand community complex, is unknown given the wide variation in species composition and sedimentary characteristics that comprise this community type (NPWS 2014b). ***While some characteristics of this community type match those described and investigated in Forde et al (2015) and O'Carroll et al (2016) others are quite different.*** *In particular, areas where there are very 'soft' mobile sands with impoverished communities would appear to be sensitive to the placement of trestles and even foot traffic among the trestle rows. On this basis, it is assumed that intertidal shellfish culture has the potential to disturb this community type."*

It is clear that in the inner parts of the bay (at proposed culture sites), there are extremely stable sedimentary habitats representative of this community complex that are suitable for trestle culture and sufficiently resilient to disturbance.

Based on the AA Report which noted "Mobile sand community complex is such that there are likely to be locations where the sediments are extremely mobile (and soft) thus making them unsuitable for aquaculture operations." The Department's Engineering Division have clearly identified any such areas and excluded those from licensing.

4. Screening Out of SPAs
Comments:-
"The Appropriate Assessment screens out a number of SPAs on the basis of no spatial overlap. However, the following SPAs - Falcarragh to Meenlaragh SPA (site code 004149), Inishbofin, Inishdooey and Inishbeg SPA (site code 004083) and Horn Head to Fanad Head SPA (site code 004194) lie within the 15km zone of impact (DEHLG, 2010) of Ballyness Bay. No rationale is given as to how or why potential detrimental interactions between the conservation features of these SPAs and aquaculture activities within Ballyness Bay were ruled out. It is therefore recommended that a more thorough and complete consideration of theses SPAs and their conservation features be documented in order to complete this appropriate assessment process."

Response: -
It is noted that to date, 30+ Natura reports have been produced and the comment from DCHG in relation to SPA screening is the first time, to our knowledge, this Department have requested additional detail in relation to a screening exercise of proximate Natura sites. The Department scientific advisors concur that connectivity with regard to Natura sites is an important issue and this was considered when examining conservation objectives set for all proximate Natura sites.

It should be noted that particular focus on the SPA sites considered in Natura assessment reports are Species of Conservation Interest (SCI) that would exclusively use intertidal sand-flat/mud-flat habitats. Mud-flat and sand-flats are not typical feeding areas for many of the SCIs identified in the SPAs in question. These species as they are likely to feed in a diverse range of offshore or terrestrial (in the case of corncrake) habitats (Gittings and O'Donoghue 2012[1]). As such, many SCIs were considered unlikely to interact with the proposed activities. For those species that may utilise intertidal sedimentary habitats (i.e., gull species), it is the view of the MI that gull species will not rely to any great extent on the intertidal sandflats found in Ballyness Bay given alternative feeding habitat is available, e.g., terrestrial or open water—as is the case in this instance.

Furthermore, it should be noted, that the interaction with trestles by gull species was considered variable in the Gittings and O'Donoghue (2012) study, and at low abundance levels (up to 10) the predicted levels closely matched the observed levels (Gittings and O'Donoghue 2012), indicating little or no negative interaction. Given the low numbers of breeding pairs (i.e. 20) of Common Gulls found on Inishbofin, Inishdooey and Inishbeg SPA and that alternative habitat between these areas and the proposed culture sites can be found, we consider it unlikely that gulls that might attend the aquaculture areas in numbers that would result in adverse impact.

The Department based on all the above considerations does not see any need to revise the outputs or conclusions in the AA report underpinning the assessment process.

SUMMARY OF MITIGATION MEASURES AND MANAGEMENT ACTIONS THAT ARE BEING IMPLEMENTED AS A CONSEQUENCE OF THE FINDINGS IN THE APPROPRIATE ASSESSMENT REPORT

Taking account of the recommendations of the Appropriate Assessment, as well as additional technical/scientific observations/further information, the following measures are being taken in relation to licensing aquaculture in this SAC:

- Sites T12/441B and T12/441C which were originally assessed as oyster and clam cultivation are now being processed as oyster cultivation only sites.
- On the basis of the Appropriate Assessment findings only Triploid seed will be licensed for use in the Bay.
- Source of seed and changes to source of seed to be approved by the Department of Agriculture, Food and the Marine in advance.
- Due to the proximity of the site and the fact that there is no specific barrier to access e.g. tidal channel between it and the Seal Haul out area it is proposed to not licence site T12-508A applied for on the same sand bank.
- Proposed sites where there is proximity to seal sites will be reduced where possible or not licensed to maintain a buffer between the aquaculture sites and the seal areas.
- To avoid the overlap of proposed access routes with Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]. The new access route shown above which was assessed in the AA and referenced in the draft conclusion statement will be implemented in relation to any sites to be licensed on the west side of the Bay, that had proposed routes which overlapped with the grey dunes habitat.

- Locations where the sediments are extremely mobile (and soft) thus making them unsuitable for aquaculture operations will be excluded from licensing.
- A Licence condition requiring strict adherence to the identified access routes over intertidal and nearshore habitat in order to minimise species/habitat disturbance will be included.
- A Licence condition requiring full implementation of the measures set out in the draft Marine Aquaculture Code of Practice prepared by Invasive Species Ireland (e.g. http://invasivespeciesireland.com/cops/aquaculture).
- The movement of stock in and out of the Ballyness Bay SAC should adhere to relevant fish health legislation.
- The use of updated and enhanced Aquaculture and Foreshore Licences containing terms and conditions which reflect the environmental protection required under EU and National law.

Proposed Licensing

The Licensing Authority is satisfied that, given the conclusions and recommendations of the Appropriate Assessment process, the implementation of the above measures will mitigate pressures on Natura 2000 features. The Conclusion Statement will be updated, as appropriate.

Conclusion

Accordingly, the Licensing Authority is satisfied that, subject to adoption of the above listed mitigation measures and management actions; aquaculture licensing is not likely to significantly and adversely affect the integrity of the Ballyness Bay SAC.

November 2019