Agenda Item	6.5
Report No	PLN/062/19

#### HIGHLAND COUNCIL

**Committee:** North Planning Applications Committee

**Date:** 31 July 2019

1.1

**Report Title:** 19/01413/FUL: The Scottish Salmon Company

North Aird, Ardheslaig, Loch Shieldaig

**Report By:** Area Planning Manager – North

1. Purpose/Executive Summary

**Description:** Marine Fish Farm - Atlantic salmon: new site consisting of 4 x

100m circumference circular cages

**Ward:** 05 - Wester Ross, Strathpeffer And Lochalsh

**Development category:** Local

**Reason referred to Committee:** Number of objections and objection from statutory consultee

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

#### 2. Recommendation

2.1 Members are asked to agree the recommendation to Grant planning permission as set out in section 11 of the report.

#### 3. PROPOSED DEVELOPMENT

- 3.1 This application proposes the installation and operation of a salmon farm comprising of 4 x 100m circumference fish pens. In effect, this proposal amounts to the addition of four pens to the existing Aird fish farm, a 10 x 100m circumference layout positioned to the immediate south of the current proposal and originally dating back to the period before fish farming required planning permission.
- 3.2 The existing site is laid out in a 2 x 5 configuration but with the northernmost pair of pens separated from the remaining eight by some 60m. The four proposed pens will be positioned immediately to the north of these two. This will result in a combined development with the appearance of a single farm consisting of a 2 x 8 element to the south and a 2 x 6 element to the north with the boat-like feed barge positioned between the two. The maximum biomass for this proposal is 650 tonnes, bringing the total for the Aird site to 2400 tonnes.
- 3.3 No Pre-application consultation was provided for this proposal but it was made the subject of Environmental Impact Assessment (EIA) screening and scoping applications see section 3 below.
- 3.4 Supporting Information: as the proposal is considered to be EIA development, the application was submitted with a comprehensive set of supporting information in the form of the Environmental Statement. This includes detailed appraisals of the ecological, visual and other impacts associated with the proposal as well as proposed mitigations.
- 3.5 Variations: The applicant has provided some further supporting information by way of responses to third party and consultee comment.
  - Most importantly, this has included a commitment to cease production at the applicant's nearby Kenmore fish farm if permission is granted for this 'expansion' at the Aird site (see paragraph 10.21 below)
- The applicant has also made a formal response to the consultation comments from Marine Scotland (see paragraph 7.9 below), including;
  - although the new Controlled Activities Regulation (CAR) licence sets a lower limit for emamectin benzoate use which only amounts to enough to treat 70% of the maximum (2400 tonnes) biomass, this will be administered as in-food 'SLICE' treatment to the juvenile population in the first year of production when biomass in much lower – i.e. all fish will be treated to some degree
  - the Environment Management Plan (EMP) monitoring strategy has been reviewed to take account the work of the Shieldaig field station
- 3.7 The applicant has also made a formal response to the consultation comments from Wester Ross Area Salmon Fishery Board (WRASFB) (see paragraph 7.7 below), including;

- for the WRASFB to uphold the assertion that there will be significant effects (in the EIA context), it would be necessary to demonstrate one of the following;
  - the proposed development has the potential to impact either the Scottish (national) or European (international) populations of Salmonids (i.e. will have impact beyond the CandS population).
  - The population has low or no capacity to absorb detrimental changes in baseline or population trends; or
  - the proposed development will result in a material or fundamental change in the character or trends of the salmonid population.
- 3.8 The applicant has also submitted an analysis of all the third party and consultee responses submitted and provided responses to the points made.

#### 4. SITE DESCRIPTION

- 4.1 The site is located close to the western shore of Loch Shieldaig towards the southern end of the Aird peninsula and adjacent to the settlement of Ardheslaig and the narrow inlet of Ob na h-Acairseid. Loch Shieldaig lies between Loch Torridon and Upper Loch Torridon.
- 4.2 This is a notably mountainous landscape and the shorelines of these sea lochs mostly consist of steeply sloping landforms. Although the Aird peninsula only rises to some 90m above sea level, the coastline immediately adjacent to the proposal also falls steeply into the sea.

#### 5. PLANNING HISTORY

5.1	Reference not known	Adjacent site consented by Crown Estates	Granted Pre-1986
5.2	Reference not known	Adjacent site granted planning permission though the Audit and Review process establishing the 10 x 100m pen arrangement	Granted 2011
5.3	11/04642/FUL	Adjacent site: Proposed installation of automated feed barge and expansion of mooring area at fish farm	Granted 09.03.2012
5.4	18/03841/SCR E	Marine Fish Farm - Atlantic salmon - Installation of additional 6 x 100m circle cages to existing 10 x 100m cages in extended planning boundary	EIA development 20.08.2018
5.5	18/03845/SCO P	Marine Fish Farm - Atlantic salmon - Installation of additional 6 x 100m circle cages to existing 10 x 100m cages in extended planning boundary	Response 03.10.2018

#### 6. PUBLIC PARTICIPATION

6.1 Advertised: EIA Development and Unknown Neighbour

Date Advertised: 12.04.2018

Representation deadline: 12.05.2018

Timeous representations: 10 responses from 8 households

A petition containing 69 signatories

Late representations: 8 responses from 7 households

- 6.2 Material considerations raised are summarised as follows:
  - a) proposal will have an increased negative impact upon the Wester Ross NSA
  - b) submitted visualisations underplay the full visual impact of the extended farm
  - c) service vessels also have a negative visual impact
  - d) existing feed barge is in breach of previous planning condition requiring repainting in muted colours it should be repainted grey
  - e) visual impact could harm tourist industry which is locally important
  - f) local community derives no benefit from the existing farms and the proposal will not create any new jobs in the local community
  - g) proposal will reduce water quality for competitive swimming
  - h) proposal will further damage the environment including local wild fish populations
  - i) farm is close to a migratory salmon route
  - j) Marine Scotland research station data shows correlation between fish farming activity and sea trout lice levels. This appears to breach North Atlantic Salmon Conservation Organization (NASCO) guidance
  - k) increased Acoustic Deterrence Device (ADD) units will increase impact upon the harbour porpoise Special Area of Conservation (SAC)
  - generator noise from the existing feed barge is already a nuisance and more soundproofing should be installed
  - m) question the reliability of the benthic and water column modelling methods. Benthic impacts increased due to the slope of the seabed
  - n) impacts on Priority Marine Features (PMF) understated
  - o) question the degree of contact and coordination with Mowi as the other operator in the loch system
  - p) existing farm is a navigational obstruction and a hazard to creel fishing from underwater obstructions and trailing lines
  - g) high levels of escapes have occurred from this farm in the past

6.3 All letters of representation are available for inspection via the Council's eplanning portal which can be accessed through the internet www.wam.highland.gov.uk/wam.

#### 7. CONSULTATIONS

- 7.1 Shieldaig Community Council: Objection making the following main points;
  - benthic and water column impact analyses underplay impacts
  - increased ADD usage will have a negative impact on the Minch SAC and other cetaceans
  - farm is close to known migratory salmon routes and MS has evidence of sea-lice connectivity between Loch Torridon farms and the local salmonid population
  - increased visual impact on the Wester Ross NSA will be unacceptable
  - economic and employment claims are exaggerated
- 7.2 Northern Lighthouse Board: No objection recommended navigational lighting
- 7.3 Scottish Water: No objection
- 7.4 SEPA: No objection a CAR licence for the increased biomass has already been issued. Benthic and water column health will be controlled adaptively through CAR
- 7.5 Transport Scotland: No objection
- 7.6 Historic Environment Scotland: No objection
- 7.7 Wester Ross Area Salmon Fishery Board (WRASFB): Objection on the following grounds;
  - The proposal is contrary to the requirements of Policy 50 of the Highlandwide Local Development Plan because it will result in a significant adverse effect on wild fish populations
  - Any biomass increase in the Loch Torridon system will result in this adverse impact as evidenced by most recent Reporter decision at nearby Sgeir Dughall in which consent was conditional on fallowing another site at Camas an Eilean (250 tonnes biomass) - suggesting that a maximum had been reached. This application proposes 650 tonnes biomass.
  - The farms in the Loch Torridon system have had a poor record of maintaining sea lice infestation at below Scottish Salmon Producers Organisation (SSPO) Code of Good Practice (CoGP) levels over recent years. Most recent figures for Spring 2019 indicate that the actual number of sea lice on farms was the worst since 2015. No evidence of improvement as suggested by applicant. Emamectin Benzoate will not be able to be relied on to such a great extent in the future as SEPA tightens controls on its use.

- Planktonic sea lice monitoring carried out by Marine Scotland over the last two decades at their Shieldaig field station (5km from the Aird site) shows a correlation between raised planktonic sea lice levels in the loch and the second year of production for farms in the area.
- This data also shows reduced numbers of Sea Trout present during those second years
- Marine Scotland Science (MSS) have concluded that fish farms are a much larger contributor to the number of sea lice in the Loch Torridon system than the wild fish population
- Some evidence of an impact in the neighbouring Gairloch to the north.
- The Rivers Torridon and Balgy are both spawning habitats for salmon and the migratory route for these fish passes close to the farm. MSS have a tracking project but results have not been published yet.
- Sea lice emissions in Torridon may be contributing to raised levels in coastal waters that provide the migratory route for salmon up the west coast of Scotland
- WRASFB are not convinced the Environmental Management Plan (EMP) can control these negative impacts to an acceptable level

A further letter was received on 22 July 2019 responding to the applicant's own reply to the above (see paragraph 3.7). The following further points were made;

- the consultation response from MSS suggests the proposal could have a 'significant effect' not just the WRASFB response
- the sea lice infestation graphs referred to are annotated in 'proportional' amounts – i.e. the 0.75 figure indicates 75% not 0.75% as suggested by applicant
- there is no evidence of improved sea lice control at the Aird site April 2019 data shows the lice per fish figure to have risen to 1.26
- WRASFB maintains its objection and continues to believe that the EMP is not robust enough to achieve acceptable sea lice levels at this farm

#### 7.8 SNH: No objection but make the following points;

- likely significant effect on the qualifying interests (harbour porpoise) of the Inner Hebrides and the Minches SAC through the use of ADDs
- Appropriate Assessment required (see appendix to this report)
- advise that the proposal will not adversely affect the integrity of the site provided adherence to the submitted ADD deployment plan and equipment specification
- details should be secured by condition with a clause to allow adaptive management over time
- likely significant effect on the freshwater pearl mussel qualifying interest of the River Kerry SAC from escaped farmed fish – do not believe sea lice connectivity exists
- appropriate assessment required
- the escapes contingency plan should be secured by condition
- reduction to four cages (from six as scoping stage) suggests that there will be no adverse effect on the National Scenic Area (NSA)

- do not believe that any impacts on Priority Marine Features will result in any significant impacts upon their national status
- 7.9 Marine Scotland Science: No objection but make the following points;
  - current data suggests that farms in the region have periodic difficulties controlling lice under current management practices to meet with CoGP standards
  - proposed monitoring strategy fails to take account of the work and datasets of Marine Scotland's Loch Shieldaig field station
  - Data shows correlation between high lice levels on wild fish and second year of production of the local farms and suggests'
    - "...sea lice produced by the local farms has a significant and potentially substantial impact on the local sea trout population in the river Shieldaig. Therefore increasing biomass in the area, with no reduction in sea lice numbers per fish, will likely impact on the local sea trout population..."
  - The varied CAR licence to allow this proposal now limits emamectin benzoate to 622g. Not clear this is enough to treat maximum biomass up to 5 times. Clarification on implications of this for sea lice treatment required

#### 8. DEVELOPMENT PLAN POLICY

The following policies are relevant to the assessment of the application

#### 8.1 Highland Wide Local Development Plan 2012

- 28 Sustainable Design
- 36 Development in the Wider Countryside
- 49 Coastal Development
- 50 Aquaculture
- 57 Natural, Built and Cultural Heritage
- 58 Protected Species
- 59 Other important Species
- 60 Other Importance Habitats
- 61 Landscape
- 72 Pollution

#### 8.2 Wester Ross Local Plan (as continuing in force) April 2012

No specific policies apply

### 8.3 West Highland and Islands Local Development Plan (as submitted to Scottish Ministers) 2019

No specific policies apply

#### 8.4 Highland Council Supplementary Planning Policy Guidance

Highland Historic Environment Strategy (Jan 2013) Highland's Statutorily Protected Species (March 2013)

#### 9. OTHER MATERIAL POLICY CONSIDERATIONS

#### 9.1 Scottish Government Planning Policy and Guidance

SPP (2014) paragraph 204 states;

"Planning authorities should apply the precautionary principle where the impacts of a proposed development on nationally or internationally significant landscape or natural heritage resources are uncertain but there is sound evidence indicating that significant irreversible damage could occur. The precautionary principle should not be used to impede development without justification. If there is any likelihood that significant irreversible damage could occur, modifications to the proposal to eliminate the risk of such damage should be considered. If there is uncertainty, the potential for research, surveys or assessments to remove or reduce uncertainty should be considered."

SPP (2014) paragraph 250 states;

- "The planning system should:
- play a supporting role in the sustainable growth of the finfish and shellfish sectors to ensure that the aquaculture industry is diverse, competitive and economically viable;
- guide development to coastal locations that best suit industry needs with due regard to the marine environment;
- maintain a presumption against further marine finfish farm developments on the north and east coasts to safeguard migratory fish species."

SPP (2014) paragraph 253 states;

".....The planning system should not duplicate other control regimes such as controlled activities regulation licences from SEPA or fish health, sea lice and containment regulation by Marine Scotland."

National Marine Plan

#### 10. PLANNING APPRAISAL

10.1 Section 25 of the Town and Country Planning (Scotland) Act 1997 requires planning applications to be determined in accordance with the development plan unless material considerations indicate otherwise.

#### **Determining Issues**

This means that the application requires to be assessed against all policies of the Development Plan relevant to the application, all national and local policy guidance and all other material considerations relevant to the application.

#### **Planning Considerations**

- 10.3 The key considerations in this case are:
  - a) compliance with the development plan and other planning policy

- b) planning history
- c) parliamentary reports and the precautionary principle
- d) offer to cease production at Kenmore farm
- e) visual and landscape impact
- f) impact on residential amenity
- g) impact upon wild fish populations
- h) impact upon the River Kerry SAC
- i) impact upon the Inner Hebrides and the Minches SAC
- j) economic impact

#### Development plan/other planning policy

- 10.4 Policy 50 (Aquaculture) of the Highland-wide Local Development Plan (HwLDP) states that the Council will support the sustainable development of finfish and shellfish farming subject to there being no significant adverse effect, directly, indirectly or cumulatively on the natural, built and cultural heritage and existing activity. As discussed in the report below, the proposal will have some negative visual impact, some impact on the SAC qualifying features and other priority marine features and also some negative impact on local wild salmonid populations. However, particularly in the context of the offer to close the Kenmore farm, none of these impacts is considered significant enough to justify a reason for refusal and the ecological effects can be mitigated through the required adaptive management techniques.
- 10.5 Policy 28 (Sustainable Design) of the HwLDP identifies considerations that must be assessed including;
  - impact on individual and community residential amenity
  - impact, including pollution and discharges, on habitats, freshwater systems, species, marine systems, landscape and scenery and particularly within designated areas
  - demonstrate sensitive siting and high quality design in keeping with local character and the historic and natural environment

The policy also states that;

In the relatively rare situation of assessing development proposals where the potential impacts are uncertain, but where there are scientific grounds for believing that severe damage could occur either to the environment or the wellbeing of communities, the Council will apply the precautionary principle.

This must be read in conjunction with SPP (2014) paragraph 204 (see above) which post-dates the HwLDP.

For the reasons given below the landscape, ecology and wild fish concerns are not considered to constitute reasons for refusal.

10.6 Policy 36 (Development in the Wider Countryside) of the HwLDP – reiterates the considerations identified by Policy 28 but adds that regard will also be had to the extent to which the proposal would help, if at all, to support communities in Fragile Areas (this location falls within this area as defined by Highlands and Islands Enterprise) in maintaining their population and services by helping to re-populate communities and strengthen services.

The submitted documents and third party comments suggest the application could have positive employment impacts although there are balancing arguments.

- 10.7 Policy 49 (Coastal Development) of the HwLDP requires nearshore water development to comply with the other policies of the development plan in achieving sustainable, well planning coastal development.
- 10.8 Policy 57 (Natural, Built and Cultural Heritage) of the HwLDP identifies natural, built and cultural features of:
  - international importance and states that developments likely to have a significant effect on a site, either alone or in combination with other plans or projects, and which are not directly connected with or necessary to the management of the site for nature conservation will be subject to an appropriate assessment. Where we are unable to ascertain that a proposal will not adversely affect the integrity of a site, the planning authority will only allow development if there is no alternative solution and there are imperative reasons of overriding public interest, including those of a social or economic nature.
  - national importance and states that the authority will allow developments that can be shown not to compromise the natural environment, amenity and heritage resources;

The critical issues here are the Inner Hebrides and the Minches SAC (harbour porpoise) and the River Kerry SAC (fresh water pearl mussel/salmonid host fish). Appropriate Assessments have been carried out in regard of both these SACs (see Appendices below) and have concluded, in line with SNH guidance, that the proposal will no have an adverse effect on the integrity of either designation, subject to the adaptive management requirements secured by the proposed conditions.

SNH have further concluded that any impacts on priority marine features will be insignificant in respect of their national populations.

- 10.9 Policy 58 (Protected Species) of the HwLDP supports Policy 57 above with a presumption against proposals which are likely to have an adverse effect, individually and/or cumulatively, on European Protected Species.
- 10.10 Policy 59 (Other Important Species) of the HwLDP requires the council to have regard to the presence of, and any adverse effect of development proposals, either individually and/or cumulatively on species including the multi-sea-winter component of the Atlantic salmon population (included in the UK Biodiversity Action Plan Priority Species List and as a Priority Marine Feature).

For the reasons below, the proposal is considered acceptable in this regard subject to the securing of adaptive management techniques by planning condition.

10.11 Policy 61 (Landscape) of the HwLDP – requires proposals to be designed to reflect the landscape characteristics and special qualities identified in the Landscape Character Assessment of the area in which they are proposed. This will include consideration of the appropriate scale, form, pattern and construction materials, as well as the potential cumulative effect of developments where this may be an issue.

This is an important concern given the location of the farm within the Wester Ross National Scenic Area. The critical consideration is the degree of change resulting from the proposal in the context of the existing farm. For the reasons given below, it is considered to be acceptable in visual terms.

10.12 Policy 72 (Pollution) of the HwLDP – states that proposals that may result in significant pollution ..... will only be approved where a detailed assessment report on the levels, character and transmission and receiving environment of the potential pollution is provided by the applicant to show how the pollution can be appropriately avoided and if necessary mitigated.

The submitted environmental statement is considered to meet this requirement, particularly in the context of SEPA's CAR licence already issued.

#### **Planning History**

- 10.13 The fact that there has been a fish farm in this location for many years is a material consideration for this proposal. The principle of this form of development has been established and the existing consent represents a 'fall-back' position for the applicant which needs to be taken into account when assessing the impacts of the overall form of development.
- 10.14 Equally, the existing development already represents a certain level of environmental impact which must be taken account of in a cumulative sense as part of this assessment.

#### Parliamentary reports and the precautionary principle

- 10.15 At the current time, no assessment of a fish farm application would be complete without some acknowledgement of the greatly increased public scrutiny of the industry which has accompanied and been reflected by the inquiries held by two Scottish parliamentary committees in 2018 and their subsequent reports.
- 10.16 Several of the third party comments received in respect of this application have referenced these reports and particularly the criticism of the industry that they contained. One theme repeated many times in the objections was a call by the committees for regulators, including planning authorities, to employ the precautionary principle on a more regular basis.

- 10.17 However, as identified at paragraph 9.1 above, Scottish Planning Policy published in 2014 has provided a definition of the precautionary principle to be used in Scottish planning decisions. As such it is considered compatible with Scotland's international obligations as the concept has been adopted by both the UN and the EU. It is noted that this post-dates the 2012 HwLDP Policy 28.
- 10.18 The SPP definition sets some important limitations to the application of the precautionary principle. It only relates to interests of national and international importance. There should be sound evidence indicating that significant irreversible damage could occur and if there is uncertainty, the potential for research, surveys or assessments to remove or reduce uncertainty should be considered.
- 10.19 In this case the interests of international importance are the two SACs assessed below and in the appropriate assessment appendices. Many parties have suggested that the precautionary principle could be legitimately used more widely. Arguably, the status of both salmon and trout as Priority Marine Feature species provides them with 'national importance'. However, the precautionary principle would only apply in these circumstances when the predicted effect related to the status of the national population as a whole rather than just a small component of it.
- 10.20 To date, the parliamentary reports have not resulted in any fundamental change to national aquaculture planning policy. National policy continues to be balanced between a generally positive approach on the mainland west coast, Western Isles, Orkney and Shetland and a prohibition on any new aquaculture off the northern and eastern mainland coasts in the interests of protecting wild fish.

Working groups have been set up to specifically examine the issue of wild fish interactions with aquaculture.

The only change in position has been from Marine Scotland who have endorsed the EMP approach to post-consent adaptive management. It is conceivable that this may be reflected in revised future national guidance and policy. Until then the Planning Authority is obliged to consider applications within the framework of current and applicable regulations, guidance and policy

#### Offer to cease production at Kenmore farm

- During the course of this application the applicants suggested that they were willing to cease operations at their Kenmore Farm, lying some 2.5km to the west of the proposal on the other side of the Aird Peninsula, if that would assist in achieving planning permission for this proposal. Such an arrangement can be secured through the use of a condition which prohibits the use of either permission concurrently with the other.
- The motivation for this offer was the consultation concerns raised by Marine Scotland and the local Fishery Board (discussed in detail below) suggesting that identified impacts upon wild fish within the wider Loch Torridon loch system were already indicating that the limits of sustainable aquaculture production were being approached or had already been reached.

10.23 Table 1 below, as submitted by the applicant, provides a summary of the biomass operated by the applicant within the wider loch system. The figures exclude a further farm operated by Mowi in Upper Loch Torridon.

Table 1 Proposed consolidation details for SSC sites in Loch Torridon

Operational Sites	Current (tonnage)	Current No. Pens	Proposed (tonnage)	Proposed No. Pens
Aird	1750	10	1750	10
Kenmore	694	7	-	-
Sgeir Dughall	2091	14	2091	14
In planning				
North Aird	-	-	650	4
Total Tonnage	4535	31	4491	28

The bottom row shows that the cessation of production at Kenmore, should the four proposed North Aird cages be approved and brought into production, will result in a small reduction in total biomass within the lochs.

10.24 The applicant's argument here is that regardless of the actual impact of the new cages on the receiving environment, the proposal can at least be seen to not be making the current situation any worse.

It is also suggested by the applicant that such an approach is very much in line with current government thinking which suggests that the future for the industry should be one of consolidation rather than proliferation where environmental constraints appear to be under pressure. Future expansion should seek out locations with minimised environmental impacts.

This proposal has implications for more material considerations that just that of wild fish interactions and an analysis of its likely impact on these is considered in detail below.

#### Visual and landscape impact

- The application includes a seascape landscape and visual impact assessment (SLVIA) together with visualisations of the proposed development from twelve viewpoints. This is an important material consideration because the site is within the Wester Ross National Scenic Area and the increased visual impact represented by this proposal has generated concern from the local community.
- The SLVIA conclusions are heavily influenced by the fact that this proposal will be read as an extension of an additional four pens to the existing ten. Consequently, much weight is placed upon the marginal change involved. The village of Shieldaig is recognised as the most significant receptor, with two outlying individual properties, a number of points on surrounding roads and core paths and neighbouring Wild Land also being included in the analysis. For each, the direct impact of the proposed development is considered to have only a small visual impact and that impact is considered to be even less significant when the existing farm is taken as the baseline reference point.

The character of the NSA is noted to encompass the influence of human settlement and activity and the proposal is suggested to be in keeping with these influences. Its coastal position is identified as a factor ensuring its visual impact is minimised and that it makes a relatively inconspicuous contribution to the local and wider seascape.

- 10.27 In their consultation response SNH note that their earlier advice to reduce the number of additional pens from 6 to 4 has been followed. They conclude that the proposal will not have an adverse effect on the integrity of the NSA or the objectives of the designation.
- 10.28 The visualisations provide a useful guide to these general conclusions of the SLVIA. The main factors illustrated by them are considered to be;
  - The existing 10 pens and the feed barge already represent quite a lot of development in the water. Visualisations from viewpoints 1, 2 and 8, at relatively close range to the south, are considered to show this clearly. Viewpoint 7 illustrates the same issue but from the eastern shore of Loch Shieldaig. The prominence of the existing farm in these views is enhanced by the lack of other development. The NSA sea and landscape is notable for its lack of man-made interventions.
  - However, these same visualisations also illustrate that the contribution to this visual impact from the additional 4 cages is relatively minor and cannot be said to materially alter the existing situation to any large degree. Local sensitivity to the existing development is understandable but this proposal does not, in itself, create an unacceptable visual impact.
  - Readily accessible public views from elevated positions are rare but it is notable that visualisations 2 and 8 demonstrate that such views can greatly increase the visual impact of the farm.
  - On the other hand, several of the visualisations provide views across the loch with the coastline behind the proposal. In the photographs from viewpoints 4, 6, and 7 taken at various ranges from land to the east, the farm is seen against the backdrop of the western coast of the peninsula and the dark rock in the intertidal zone. This greatly reduces the visual impact of the cages.
  - This situation also pertains to many of the available views of the farm from the Shieldaig settlement – viewpoint 3 – which is important because Shieldaig represents the greatest number of potential visual receptors. It is also noted that views from the north of the village are more elevated whilst those from the central portion of its loch frontage are obscured by Shieldaig Island.
  - Visualisation 9 12 each provide an example of the visual impact of the farm from the perspective of those afloat on the loch. Again, the backdrop of coastal rock still has a strong mitigating impact in respect of the cages even though some of these views are from relatively close range. What these views also confirm is the prominence of the feed barge relative to the

pens and the extra visual impact associated with a visiting well-boat. This issue, which has received third party comment is addressed in more detail at paragraph 10.30 below.

- The applicants have suggested that the cessation of use at Kenmore is a factor in the visual assessment of this proposal. Clearly, the removal of surface development from Loch á Chracaich will improve the visual outlook in that part of Loch Torridon and make a cumulative contribution to the wider landscape. However, the proposed condition can only result in the cessation of activity at Kenmore. Whilst it is likely that surface equipment would be removed in these circumstances, this cannot be required in planning terms and so only a little weight can be given to this visual aspect of the proposal.
- 10.30 The repainting of the feed barge for the existing farm was made the subject of a condition of the previous planning permission and SNH offered advice about what the scheme should try to achieve. Essentially, it amounted to dark colours on the hull and upper superstructure creating an elongating band of white between so the barge appeared to be more boat-like rather than a camouflaged dark form in the water.

The current barge features a largely white superstructure, the visual prominence of which has been commented upon by third parties. The applicants have been asked to confirm whether or not the previous condition has been complied with as there is no evidence on the Council records. If it has not then this matter will be taken forward as an enforcement issue in respect of the previous permission as it is considered that the colour scheme of the barge could be improved in this NSA setting. It would not be appropriate to make this existing barge the subject of a further condition of this application if granted.

In conclusion on the subject of visual impact, it is agreed with SNH that no unacceptable impact on the NSA will result from this development. The degree of change from the existing situation is small and the number of visual receptors is relatively low. Most views place the farm against a backdrop of dark coastal rock and, in the most general terms, the farm is a small feature within a very wide, large scale landscape which is able to readily assimilate its impact. The issue of the feed barge colours may be take forward separately.

#### Impact on residential amenity

- 10.32 It should be emphasised that the perceived loss of private residential amenity due to an impact on the outlook from a property the 'right to a view' is not a material planning consideration.
- 10.33 More than one third party raised the issue of noise emanating from machinery on the existing barge. This was suggested to result in a loss of amenity and to be only likely to get worse with the extra pens at the site.
- 10.34 In response to this the applicants have offered to install extra sound attenuation equipment on board the barge. No detail of what this might involve has been presented and so a condition is recommended to allow the details to be submitted, agreed and implemented before the new pens become operational.

#### Impact upon wild fish populations

Wild salmonids i.e. wild salmon and trout, are protected species. Among other designations, Atlantic salmon is listed on Appendix III of the Bern Convention and Appendix II and V of the EC Habitats and Species Directive and are listed on Schedule 3 of the Conservation (Natural Habitats, andc.) Regulations 1994 (as amended) whilst in freshwater. The multi-sea-winter component of the Atlantic salmon population is included in the UK Biodiversity Action Plan Priority Species List. This species is also a Priority Marine Feature (PMF). Trout (Salmo trutta) are also a PMF and are on the UK Biodiversity Action Plan Priority Species List and received some protection within the fisheries acts relating to the protection of 'salmon'. The Council also has a Biodiversity Duty under the Conservation of Nature (Scotland) Act 2004 to protect them. Clearly therefore, any impacts on these species must be considered.

Significantly, the overall numbers of wild salmonids in Scottish coastal waters has declined dramatically over the last few decades. Whilst there is no definitive evidence to suggest this has been caused by fish farming, it has created a situation where planning authorities need to satisfy themselves that new fish farm consents will not add to the environmental pressures on an already struggling set of species and make a bad situation even worse.

The MSS consultation response stresses that there is now plenty of evidence from Norway and other producer states showing that sea lice emissions from fish farms can result in increased mortality among wild salmon and sea trout.

- 10.36 Sea lice: The key sea louse species of concern is Lepeophtheirus salmonis. These are parasites found in the wild, which can infect farmed salmon. They feed on the fish mucus and flesh. Given the high numbers of fish in fin fish cages, the population of the lice can rapidly increase and affect both the farmed fish and infect/re-infect the wild population. In addition, numerous studies have shown that sea lice in the receiving environment tend to be higher during second years of production of a fish farm and therefore pose a greater risk to wild salmonids at that time. For clarity, marine fish farms tend to operate on roughly two year production cycles, at the end of which all remaining fish are harvested out and the site is left fallow for several weeks or months prior to re-stocking. Once restocked, the lice levels are generally low for at least the first few months, then, if there is a sea lice issue in the area, the numbers can build up as the farmed fish grow bigger.
- 10.37 The industry's Code of Good Practice (CoGP) states that average levels of 0.5 adult female lice per fish between February and June and 1.0 adult female lice per fish between July and January should be sought. If these levels are reached or exceeded, they are the suggested criteria for sea lice treatment. Further to this, MSS noted the operator has a target of zero adult female lice in spring as per the CoGP.

- 10.38 Following the Environment, Climate Change and Land Reform Committee report on the environmental impacts of salmon farming (March 2018), it was proposed that site-specific data for all marine fin fish farms would be forthcoming in due course. Individual site data are now published by the SSPO as from May 2018, but these are provided with a 3-4 month time lag.
- 10.39 MSS also state that adherence to the suggested criteria for treatment of sea lice stipulated in the industry CoGP may not necessarily prevent release of substantial numbers of sea lice from aquaculture installations.

The issue here relates to the very large numbers of fish reared within the pens of a farm relative to the much smaller number of wild salmonids inhabiting and/or transiting the waters in its vicinity. The 500,000 to 750,000 fish in the farm will exceed local wild fish populations to a very large extent. Consequently, even when the numbers of sea lice per farmed fish is relatively low, the total number of adult and planktonic sea lice entering the local receiving environment may still be many times greater than the naturally occurring level associated with the wild fish. This increases the risk of infection for wild fish to a corresponding degree.

The consultation responses from both Marine Scotland (MSS) and the Fishery Board are notable for the degree of concern they contain in respect of the impact of the existing fish farming activity in the Torridon loch system on the sea trout and salmon populations present.

Significantly, at the point the River Shieldaig enters the loch, Marine Scotland operate a fish trap and field station engaged, since 1999, in an investigation into the decline of sea trout on the west coast of Scotland and specifically focussed upon fish farm/wild fish interactions.

MSS are critical of the applicant's submitted EMP monitoring strategy because it does not make reference to the body of research data available from this field station.

10.41 The data shows a clear correlation between raised levels of sea lice infestation on wild sea trout and the second year of farmed fish production cycles when there is a greater amount of farmed biomass.

More worryingly, in most years the proportion of sea trout with sea lice infestation levels suggested to subject them to serious physiological stress and potentially death exceeded 25% and in three of those years exceeded 50%.

Consequently, MSS conclude that this research ".....suggests that sea lice produced by the local farms has a significant and potentially substantial impact on the local sea trout population...."

10.42 MSS also state that historically difficulties were experienced with sea lice management in the Torridon farm management area but that this has improved in the most recent two production cycles. They note that the applicant has submitted an EMP with on-farm treatment strategies which rely more heavily on non-chemical based techniques than in the past. It also includes wild fish and planktonic sea lice monitoring programmes to inform the adaptive revision of its management strategies over time.

Marine Scotland has recently placed its support behind the use of EMPs as a key element in addressing the environmental impacts of fish farming in a way that will allow the industry to adapt and grow sustainably.

The Fishery Board reiterate the clear evidence of the serious impact of sea lice emissions from the Torridon sea farms on local wild fish populations but are much less positive than MSS that the farms can control these emissions in the future. They point to poor performance at the beginning of this year and, in their second letter dated 20 July 2019, point out that the April 2019 lice per fish figure for Aird had risen to 1.26.

Whilst, in general, the Board is positive about the suggested use of the EMP approach to improve the environmental performance of the Scottish fish farm industry, it does not think it is appropriate in this case because the loch system is already at over-capacity and current performance suggests that the sea lice control measures to be included in the EMP and which are already being used at the existing farm, are not working.

They point also to their own sweep net research from the spring of this year in Loch Gairloch (next loch northwards up the coast) in which 30 heavily infested sea trout with an average of 100 lice per fish were sampled.

The Fishery Board's concern is that sea lice impacts from the Torridon lochs are much more widely spread than officially recognised and could be having an detrimental impact upon salmon migratory routes both within the lochs and offshore.

MSS have confirmed that they are engaged in a study in the lochs in respect of migratory routes but have no formal results to report at this time.

- 10.44 Given all of the above evidence it would have been difficult for officers to conclude that the originally proposed increase in biomass at the farm would be compatible with Policies 50, 57 and 59 of the development plan or the Council's general biodiversity duty. There is already a national decline in wild salmonids and the potential of the proposal to make this situation worse suggests that this local impact has a direct connection to the national population problem. Consequently, a recommendation of refusal would have been likely.
- The applicant appears to have accepted this argument and has responded positively by suggesting that the 694 tonnes of biomass at the Kenmore farm should be taken out of production if this 650 tonne extension at Aird were approved and implemented.

To the extent that it results in a small decrease in overall biomass in the loch system as a whole, an argument can be made that the amended proposal will not make the existing situation in respect of sea lice pressure on wild fish any worse. This would suggest that the argument for refusal is, at least partially, overcome.

However, it is noted that this proposal will still result in a situation in which a greater biomass will be positioned within a relatively enclosed inner loch and close to the migratory salmon route to the sea. So, in itself, it doesn't address all the concerns raised by the consultees.

- 10.46 It is considered though that in the circumstances of an overall reduction in biomass in the wider loch system, this residual concern can be overcome through the imposition of an EMP including wild fish and sea lice monitoring and adaptive management commitments.
- 10.47 EMPs have been a requirement of several recent planning approvals in the Highland area and in Argyll and Bute including those decided on appeal by the DPEA. Marine Scotland have now indicated that they will be making this form of adaptive management a requirement for all fish farm applications.
- 10.48 Ideally, an EMP should achieve the following;
  - a) a description of the methods, techniques and equipment (chemicals, fresh water treatments, cleaner fish, net design, good husbandry practice etc.) to be used to maintain sea lice infestation numbers at the lowest possible levels throughout each production run
  - b) a description of how lice levels will be monitored and reported
  - c) a methodology of how rising sea lice levels will be addressed in the form of a positive feedback loop of interventions and monitoring
  - d) a commitment to reduce biomass if these interventions prove unable to bring sea lice numbers down to an acceptable level within a short period of time

The above represents normal practice on a fish farm. However, the EMP requires a link to be made with wild fish health and numbers;

- e) a programme of wild fish health and numbers monitoring specific to the site which identifies wild salmonid habitats and populations most likely to be impacted by sea lice emissions from the farm. This may include planktonic sea lice monitoring to inform the wild salmonid populations most at risk.
- f) a commitment at the end of each production run to assess, alongside the planning authority and other statutory bodies, the wild fish monitoring results and, if any causal correlations are identified, agree and implement adjustments to the next production cycle (a feedback to (a) above) to address any harm to wild fish populations being caused by sea lice emissions from the farm.
- 10.49 The applicant has submitted an EMP with this application. It is stated to be very similar to one recently approved for sites within the Argyll and Bute planning authority area.
- 10.50 The applicant has suggested that the EMP approach now has the explicit support of Marine Scotland and the Scottish Salmon Producers Organisation (SSPO) and that this EMP has been developed in that context. Although not perfect, from the authority's point of view, it does seem to represent a step-change in the approach of this company to the adaptive management approach.

- 10.51 It contains most, if not all, of the elements outlined in paragraph 10.48 above;
  - an Integrated Sea Lice Management Plan containing a positive feedback loop in terms of farmed fish monitoring and treatment with a Sea Lice Action Plan and Veterinary Health Plan which are drawn up at the start of each production cycle.
  - a commitment to exceed CoGP sea lice standards
  - a commitment to reduce biomass if treatments are unsuccessful for a set period of time
  - a Wild Fisheries Sea Lice Monitoring Strategy which includes;
    - o a baseline data gathering stage for both wild salmonids and planktonic juvenile sea lice
    - o further planktonic monitoring triggered by a breach in farm lice levels
    - general on-going wild fish monitoring throughout the operational cycle
  - commitment to a bi-annual meeting with local fisheries board, MSS and the planning authority to discuss results
  - commitment to treat the EMP as a live and adaptive document over time
- 10.52 With regard to the submitted plan it is considered that it should make a clearer and more explicit commitment to carrying out the baseline monitoring during each fallow period between production cycles. Furthermore, this should be linked to a commitment to hold one of the regular meetings with the fisheries board, MSS and the planning authority during the fallow period to specifically discuss the adaptive management to be applied to the next production cycle and the monitoring evidence to support it. This will also allow MSS to feed in their own scientific evidence from the River Shieldaig field station.

It must also contain a specific commitment to include a reduction in biomass as one of the adaptive management options should other measures prove to be inadequate at addressing the negative impacts on the wild fish population as evidenced from the wild fish monitoring strategy approved as part of this application.

- 10.53 In this regard a condition is recommended requiring the submission of an amended EMP containing the following adjustments;
  - a specific commitment to carry out baseline monitoring of wild fish and planktonic sea lice during each and every fallow period between production cycles.
  - 2. a commitment to hold one of the regular meetings with the fisheries board, MSS and the planning authority during the fallow period to discuss adaptive management changes in respect of the next production cycle. These adaptive management changes are to include a specific commitment to reduce biomass at the site if other measures prove to be inadequate to avoid a detrimental impact on the local wild fish population as evidenced from the results of the approved wild fish/sea lice monitoring strategy.

10.54 Concerns about the sustainability of this site remain. However, the combination of the cessation of activity at Kenmore and the introduction of the monitoring and adaptive management techniques of the EMP, suggest that an overall environmental improvement against the current baseline is a real possibility. More importantly, the EMP should allow production methods and parameters to be altered to ensure that this is achieved.

Although the criticism regarding current performance from WRASFB is valid and suggests that there is plenty of room for improvement in the application and management of the sea lice control measures featured in the EMP, these measures are known to be effective in other sites. The adaptive nature of the EMP should allow these measures to be fine tuned to this site. If that doesn't happen the EMP condition includes a requirement for the applicant to commit to a reduction in biomass if other measures prove inadequate to address the negative impacts on the wild fish population as evidenced from the wild fish monitoring strategy approved as part of this application.

A condition to limit maximum biomass in the four cages covered by this application to the 650 tonnes stated is also necessary to ensure the purpose of the Kenmore closure is realised.

10.55 For these reasons officer support can now be given to the proposal.

#### Impact upon the River Kerry SAC

- 10.56 SNH have identified that the proposal is likely to have a significant effect on the freshwater pearl mussel (FWPM) qualifying interest of the River Kerry SAC. Consequently, the Council is required to carry out an appropriate assessment.
- 10.57 The appropriate assessment can be found at Appendix 2 below. A precis of the main points;
  - the host species for the FWPM in the River Kerry is salmon
  - their northerly migration route takes them away from any sea lice associated with the proposal
  - introgression with escaped fish from the proposal could have a adverse impact on site integrity (AESI) by reducing the quality and altering the habit of the resultant salmon
  - the Escapes Contingency Plan to be secured by condition as part of the EMP is considered sufficient to avoid an adverse impact on site integrity.

#### Impact upon the Inner Hebrides and the Minches SAC

- 10.58 SNH have identified that the proposal is likely to have a significant effect on the harbour porpoise qualifying interest of the Inner Hebrides and the Minches SAC. Consequently, the Council is required to carry out an appropriate assessment.
- 10.59 The appropriate assessment can be found at Appendix 2 below. A precis of the main points;
  - the edge of the SAC lies at the boundary between Loch Shieldaig and Loch Torridon some 1700m from the proposal

- noise from the proposed ADDs at the site could disrupt the normal patterns of behaviour and movement of porpoise within the SAC and this could amount to an AESI
- the submitted ADD deployment plan, so long as its details are secured by condition, is considered to be sufficient to avoid an AESI.
- the condition will need to include monitoring and review procedures to ensure this conclusion remains valid for the lifetime of the consent

#### **Economic impact**

- 10.60 It is possible that the expansion of the existing fish farm could have a positive impact on local employment and economic activity both directly and indirectly. This is particularly important for an area falling within the HIE definition of a Fragile Area.
- 10.61 A number of third party comments suggest, however, that the farm could have a negative impact upon tourism and leisure activity related to this popular area.
- 10.62 Clearly, as with any economic benefit assessment, it is the 'net' effect which is of interest. The obvious benefits of investment have to be weighed against the 'costs' which come with it, some of which are difficult to quantify. There is insufficient evidence on either side of this argument for the planning authority to come to any definitive answer and so little weight can be placed upon this consideration.

#### Other material considerations

10.63 There are no other material considerations.

#### Non-material considerations

10.64 None

#### Matters to be secured by Section 75 Agreement

10.65 None

#### 11. CONCLUSION

- 11.1 The key considerations raised by this proposal are considered to be;
  - 1. visual impact on the NSA
  - 2. impact upon the River Kerry SAC
  - 3. impact upon the Inner Hebrides and the Minches SAC
  - 4. impact upon wild salmonids
- 11.2 Whilst the proposal was found to be acceptable in regard to 1, 2 and 3, the scientific evidence suggests that sustainable capacity for fish farming within the Torridon loch system in respect of sea lice pressure on wild fish populations has already been reached.

However, the applicant's offer to cease production at the Kenmore site, reducing overall biomass in the lochs, and the adaptive management details contained in the submitted EMP are considered to be sufficient to allow the proposal to proceed. Both matters can be controlled by the recommended planning conditions.

11.3 All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

#### 12. IMPLICATIONS

- 12.1 Resource: Not applicable
- 12.2 Legal: Not applicable
- 12.3 Community (Equality, Poverty and Rural): Not applicable
- 12.4 Climate Change/Carbon Clever: Not applicable
- 12.5 Risk: Not applicable
- 12.6 Gaelic: Not applicable

#### 13. RECOMMENDATION

Action required before decision N issued

**Subject to the above,** it is recommended that planning permission be **GRANTED,** subject to the following:

#### **Conditions and Reasons**

- 1. No development shall commence until a revised Environmental Management Plan (EMP) has been submitted and approved in writing by the local planning authority. The revised EMP shall include;
  - a) a specific commitment to carry out baseline monitoring of wild fish and planktonic sea lice during each and every fallow period between production cycles.
  - b) a specific commitment to hold one of the regular meetings with the WRASFB, MSS and the planning authority during each fallow period to discuss adaptive management changes in respect of the next production cycle. These adaptive management changes are to include a specific commitment to reduce biomass at the site if other measures prove to be inadequate to avoid a detrimental impact on the local wild fish population as evidenced from the results of the approved wild fish/sea lice monitoring strategy.

Thereafter the fish farm shall not be operated other than in strict accordance with the provisions and requirements of the approved EMP.

**Reason**: In the interests of protecting wild salmonids from the effects of sea lice emissions from the farm

2. No positioning of any cages, or any operation of the fish farm hereby approved, shall take place, other than when the farmed fish biomass tonnage at the "Kenmore" farm site equals zero.

**Reason**: To define the permission in accordance with the amended details on which the planning and ecological impact assessment of the application was made

3. No operation of the fish farm hereby approved shall take place other than when the biomass in the four cages hereby approved equals 650 tonnes or less and the total biomass within the overall 14 cage Aird site equals 2400 tonnes or less.

**Reason**: To define the permission in accordance with the amended details on which the planning and ecological impact assessment of the application was made

4. No development shall take place until full details of the acoustic attenuation equipment and fittings to be installed on the feed barge has been submitted to and approved in writing by the planning authority. Thereafter, the feed barge shall not be operated other than with the approved attenuation scheme fully installed.

**Reason**: In the interests of residential amenity

- 5. No operation of the fish farm hereby approved shall take place other than in strict accordance with the provisions and requirements of the approved ADD Deployment and Usage Plan. For the avoidance of doubt this approved plan stipulates;
  - The use of 14 x Ace Aquatech US3 units featuring the low frequency transducer (RT1) and operating in the 1-2KHz frequency range
  - Data logging of deployment cues, operational dates, sound frequency and duration, Seal activity, Seal mortalities and Cetacean sightings
  - a commitment to meet with the planning authority and SNH to review the above data in the context of the conservation objectives of the Inner Hebrides and the Minches SAC and agree any changes to the Plan necessary.

A review meeting shall take place at least once every production cycle, ideally between the end of the last and the beginning of the next production period. No further ADD usage shall take place until any changes agreed at the review have been approved in writing by the planning authority and fully implemented.

**Reason**: In the interests of upholding and maintaining the conservation objectives of the Inner Hebrides and the Minches SAC.

#### **REASON FOR DECISION**

All relevant matters have been taken into account when appraising this application. It is considered that the proposal accords with the principles and policies contained within the Development Plan and is acceptable in terms of all other applicable material considerations.

#### TIME LIMIT FOR THE IMPLEMENTATION OF THIS PLANNING PERMISSION

In accordance with Section 58 of the Town and Country Planning (Scotland) Act 1997 (as amended), the development to which this planning permission relates must commence within THREE YEARS of the date of this decision notice. If development has not commenced within this period, then this planning permission shall lapse.

#### **FOOTNOTE TO APPLICANT**

#### **Initiation and Completion Notices**

The Town and Country Planning (Scotland) Act 1997 (as amended) requires all developers to submit notices to the Planning Authority prior to, and upon completion of, development. These are in addition to any other similar requirements (such as Building Warrant completion notices) and failure to comply represents a breach of planning control and may result in formal enforcement action.

- 1. The developer must submit a Notice of Initiation of Development in accordance with Section 27A of the Act to the Planning Authority prior to work commencing on site.
- On completion of the development, the developer must submit a Notice of Completion in accordance with Section 27B of the Act to the Planning Authority.

Copies of the notices referred to are attached to this decision notice for your convenience.

#### **Accordance with Approved Plans and Conditions**

You are advised that development must progress in accordance with the plans approved under, and any conditions attached to, this permission. You must not deviate from this permission without consent from the Planning Authority (irrespective of any changes that may separately be requested at the Building Warrant stage or by any other Statutory Authority). Any pre-conditions (those requiring certain works, submissions etc. prior to commencement of development) must be fulfilled prior to work starting on site. Failure to adhere to this permission and meet the requirements of all conditions may invalidate your permission or result in formal enforcement action

Designation: Area Planning Manager – North

Author: Mark Harvey

Background Papers: Documents referred to in report and in case file.

Relevant Plans: Plan 1 - 000001 Location Plan

Plan 2 - 000002 Location Plan as Proposed

Plan 3 - 000003 Site Layout Plan Plan 4 - 000004 Site Layout Plan

Plan 5 - 000005 Site Layout plan with Co-ordinates

Plan 6 - 3069-LAN-006 Cage Details

Plan 7 - 3096-LAN-007 Cage Elevations

#### **Appendix 2: Appropriate Assessment**

# Freshwater Pearl Mussel and Harbour Porpoise Special Areas of Conservation

Marine Fish Farm - Atlantic salmon: new site consisting of 4 x 100m circumference circular cages

#### 19/01413/FUL

Modified Fish Farm at North Aird, Ardheslaig, Loch Shieldaig

#### CONSIDERATION OF PROPOSALS AFFECTING EUROPEAN SITES

The status of River Kerry Special Area of Conservation (SAC), and the Inner Hebrides and the Minches Special Area of Conservation under the EC Directive 92/43/EEC, the 'Habitats Directive', means that the Conservation (Natural Habitats, etc.) Regulations 1994 (as amended) apply.

The above means that where the conclusion reached by the Council on a development proposal unconnected with the nature conservation management of a Natura 2000 site is that it is likely to have a significant effect on those sites, it must undertake an Appropriate Assessment of the implications for the conservation interests for which the areas have been designated. The need for Appropriate Assessment extends to plans or projects out with the boundary of the site in order to determine their implications for the interest protected within the site.

This means that the Council, as competent authority, has a duty to:

- Determine whether the proposal is directly connected with or necessary to site management for conservation; and, if not,
- Determine whether the proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; and, if so, then
- Make an Appropriate Assessment of the implications (of the proposal) for the site in view of that site's conservation objectives.

The competent authority can only agree to the proposal after having ascertained that it will not have an adverse effect on the integrity of the sites (AESI). If this is not the case and there are not alternative solutions, the proposal can only be allowed to proceed if there are imperative reasons of overriding public interest, which in this case can include those of a social or economic nature.

#### Screening in Likely Significant Effects

It is evident that the proposal is not connected with or necessary to site management for conservation, hence further consideration is required. The proposed fish farm has the potential to have a likely significant effect on the qualifying interests, both alone and incombination with other nearby fish farms due to impacts from sea lice on wild salmonids and/or genetic introgression from fish escapes from the farm(s). The Council is therefore required to undertake an Appropriate Assessment of the implications of the proposal for the River Kerry SAC, in view of the various sites conservation objectives. The only qualifying feature considered for the River Kerry SAC is the FWPM.

As the host species for the FWPM in the River Kerry have been found to be salmon and sea lice emanating from the proposal are considered by SNH to be unlikely to impact salmon on their northerly migratory route to and from the SAC, sea lice impacts are hereby screened out, both individually and in combination with other plans or projects, and no further assessment of this potential impact is required. This just leaves the impact of introgression to be assessed.

In respect of the Inner Hebrides and the Minches SAC, the proposed fish farm has the potential to have a likely significant effect on the qualifying interests, both alone and incombination with other nearby fish farms due to impacts from underwater noise produced by its acoustic deterrent devices.

#### APPROPRIATE ASSESSMENT

While the responsibility to carry out the Appropriate Assessment rests with the Council, advice contained within Circular 6/1995 is that the assessment can be based on the information submitted from other agencies. In this case, the Appropriate Assessment is informed by information supplied by SNH, the applicant and various published information, including those as referenced.

In its response to the Council (dated 14 May 2019) SNH has advised the proposal is likely to have a significant effect on the freshwater pearl mussel in the River Kerry SAC. However, they noted that if the proposal was undertaken in accordance with the Escapes Contingency Plan contained within the submitted EMP, the proposal would not adversely affect the integrity of the site.

In its response to the Council (dated 14 May 2019) and further advice (dated 28 June 2019) SNH has advised the proposal is likely to have a significant effect on the harbour porpoise in the Inner Hebrides and the Minches SAC. However, the state that given the relatively low sensitivity of the site in relation to the SAC and the distance to the SAC boundary they are content that the submitted ADD deployment plan if adhered to will avoid any AESI.

The second response reiterated that their assessment was based upon adherence to the submitted details – type and number of devices and a system of monitoring and reporting. Also that an adaptive management review process should also be in place over the long term. It concluded that the planning authority would need to consider securing these details by a planning condition to ensure that an AESI would not occur over the lifetime of the permission.

#### HIGHLAND COUNCIL APPRAISAL OF THE PROPOSAL

- The proposal is not directly connected with or necessary to site management for conservation;
- The proposal is likely to have a significant effect on the site either individually or in combination with other plans or projects; therefore;
- An Appropriate Assessment of the implications (of the proposal) for the site in view of that site's conservation objectives is provided below.

#### Interests of European Importance: River Kerry SAC

Table 1: The qualifying interest for which the site is designated is freshwater pearl mussel (FWPM) (*Margaritifera margaritifera*).

FWPM SAC	Approx. distance/location from proposal	Latest Assessed Condition/Summary condition*; Date
River Kerry	< 35 km North	Favourable Maintained; 23/09/2002

Table 2: The conservation objectives for SAC are (key one highlighted):

Conservation objectives (in relation to FWPM)	Applies to SAC: Y/N				
	River Kerry				
To avoid deterioration of the habitats qualifying species [FWPM] or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and	Yes				
To ensure for the qualifying species that the following are maintained in the long term:					
Population of the species as a viable component of the site	Yes				
Distribution of the species within site	Yes				
Distribution and extent of habitats supporting the species	Yes				
Structure, function and supporting processes of habitats supporting the species	Yes				
No significant disturbance of the species	Yes				
Distribution and viability of species' host species	Yes				
Structure, function and supporting processes of habitats supporting species' host species	Yes				



Figure 1: Location of proposed fish farm in relation to the FWPM SAC.

#### Freshwater Pearl Mussel

The freshwater pearl mussel (FWPM) *Margaritifera margaritifera* is protected by the SAC status and under Schedule 5 of the Wildlife and Countryside Act (1981). It is classified as critically endangered on the IUCN Red List of Endangered Species due to its unprecedented, worldwide decline during the latter part of the 20th Century<sup>1</sup>. They are on the brink of extinction; Scotland's rivers are a global stronghold for the species, containing around half of the world's population<sup>2</sup>. Many factors have contributed to the decline including pearl fishing, water pollution, siltation, declines in host fish populations<sup>3</sup> and fish farm effluent (Young *et al* 2000, in SNH, 2003). More recently, the impacts of sea lice on wild salmonids is also likely to be a key issue, as highlighted by the SNH requirement for monitoring of wild salmonids i.e. the FWPM host species, as discussed below.

The freshwater pearl mussel has a very long life-span, commonly reaching ages of over 130 years (Bauer, 1992) and individuals inhabit oligotrophic (nutrient-poor) rivers with

<sup>&</sup>lt;sup>1</sup> https://www.fba.org.uk/pearl-mussels

<sup>&</sup>lt;sup>2</sup> http://www.gov.scot/Topics/Environment/Wildlife-Habitats/paw-scotland/types-of-crime/fresh-water-pearl-mussels

<sup>&</sup>lt;sup>3</sup> https://www.fba.org.uk/pearl-mussels

clean, well oxygenated gravels<sup>4</sup>. M. margaritifera has a very interesting and complex life cycle which requires a host fish for their larvae (glochidia) 5. Their first year of life is spent harmlessly attached to the gills of young salmon or trout before they drop off to settle on the river bed. It is an offence to intentionally or recklessly kill, injure, take or disturb freshwater pearl mussels or to damage their habitat<sup>6</sup>. Mussels are normally dioecious (have separate sexes). Male mussels release sperm into the water column in June – July (depending upon water temperature). Sperm is inhaled by the female mussels to fertilise their eggs. Glochidia are released into the water column between July and September (temperature dependent). A single female can release 4 - 16 million glochidia per year, each measuring 60-70µm in length (Young and Williams, 1984). Glochidia require a salmonid fish host (Atlantic salmon, Salmo salar or brown/sea trout, S. trutta in the UK) for the next stage in their development. Glochidia are inhaled by the host and, as water passes over the fish's gills, the glochidia snap shut onto the gill filaments. Glochidia become encysted within the gill tissue and grow there until the following spring when they drop off the fish in May or early June. At this point they measure approximately 400µm in length. Juveniles must land in clean, well oxygenated gravel substrates where they will burrow into the interstices to continue their development<sup>7</sup>.

Originally widely distributed throughout Scotland, a comprehensive survey from 1996 to 1999 revealed that the FWPM is now extinct in most of the lowlands and scarce everywhere except a handful of Highland rivers (SNH, 2003). The 'Pearls in Peril' project, which ran from 2012 to March 2017, aimed to save and restore populations in 21 sites across Scotland, England and Wales. Nineteen of the 21 rivers across Britain involved in the project are in Scotland. All 21 rivers are Special Areas of Conservation<sup>8</sup>. In Scotland, these are the Rivers Dee, South Esk, Spey, Evelix, Naver, Borgie, Oykel, Fionaven, Abhainn Clais an Eas, Allt a'Mhuilinn, Ardvar and Loch a'Mhuilinn Woodlands, Inverpolly, Moidart, **Kerry**, Glen Beasdale, Ardnamurchan Burns, Rannoch Moor, North Harris, Moriston and Mingarry Burn<sup>9</sup>. However, advice from SNH notes this was more of a social project with little to add to the Appropriate Assessment. Nonetheless, as the status of the FWPM in the various SACs considered in this assessment are generally in a poor state, a relatively small additional impact from either sea lice or introgression could be likely to lead to an adverse effect on site integrity (AESI), as discussed below.

#### Introgression

Problems with introgression could impact the host wild salmonids if there were escaped farmed fish. Escapes are a realistic risk and there have been escapes from the Aird farm in the past, but the likely effects are unknown. The long-term consequences of introgression is expected to lead to changes in life-history traits, reduced population productivity and decreased resilience to future challenges (Glover *et al*, 2017).

<sup>4</sup> https://www.fba.org.uk/pearl-mussels

<sup>&</sup>lt;sup>5</sup> https://www.fba.org.uk/pearl-mussels

<sup>&</sup>lt;sup>6</sup> http://www.gov.scot/Topics/Environment/Wildlife-Habitats/paw-scotland/types-of-crime/fresh-water-pearl-mussels

https://www.fba.org.uk/pearl-mussels

<sup>8</sup> https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-species/life-nature-and-biodiversity-projects/pearls-peril

<sup>&</sup>lt;sup>9</sup> https://www.pearlsinperil.scot/Rivers

However, current evidence would suggest that, so long as the Escapes Contingency Plan embedded in the submitted EMP is adhered to (secured by planning condition) these risks are low and could not be considered likely to result in AESI.

#### Conclusion

The proposed development is unlikely to result in an adverse effect on site integrity

#### Decision

On the basis of this appraisal, it is concluded that the proposal will not have an adverse effect on the integrity of River Kerry Special Area of Conservation (SAC).

#### References

Glover, K.A. *et al* (2017) Half a century of genetic interaction between farmed and wild Atlantic salmon: Status of knowledge and unanswered questions. Fish and Fisheries, **18**, 5, 890-927.

Middleman, S.J., Fryer, R.J. Fryer, Tulett, D. and Armstrong, J.D. (2013) Relationship between sea lice levels on sea trout and fish farm activity in western Scotland. Fisheries Management and Ecology, 20, 68-74.

SNH (2003) Ecology of the Freshwater Pearl Mussel *Margaritifera margaritifera* Conserving Natura 200 Rivers, Ecology Series No. 2.

#### Interests of European Importance - the Inner Hebrides and the Minches SAC

The qualifying interest for which the site is porpoise. The SAC is the largest protected area in Europe for harbour porpoise and covers over 13,800 km2 and supports over 5000 individuals.

**Table 1.** Protected features and condition for the Inner Hebrides and the Minches SAC. Feature condition refers to the condition of the protected feature assessed at a site level. Broader conservation status is the overall condition of the feature throughout its range as outlined by the \*.

Protected Features	Feature condition	Assessment date	Broader conservation status*
Harbour porpoise	Favourable	2018	UK: Favourable European region: Favourable

The conservation objectives for the SAC are:

Harbour porpoise species are in favourable condition at Inner Hebrides and the Minches SAC and therefore the Conservation Objectives seek to *maintain* this condition

#### 6 Feature sensitivity

The harbour porpoise is a wide ranging species and occurs across the continental shelf. They also occur in deeper waters but in very low densities, and perhaps only seasonally. Harbour porpoise on the continental shelf, particularly those in coastal waters, are exposed to a wide range of pressures that are both ubiquitous (e.g. pollution) and patchy (e.g. entanglement). Harbour porpoise are considered sensitive to:

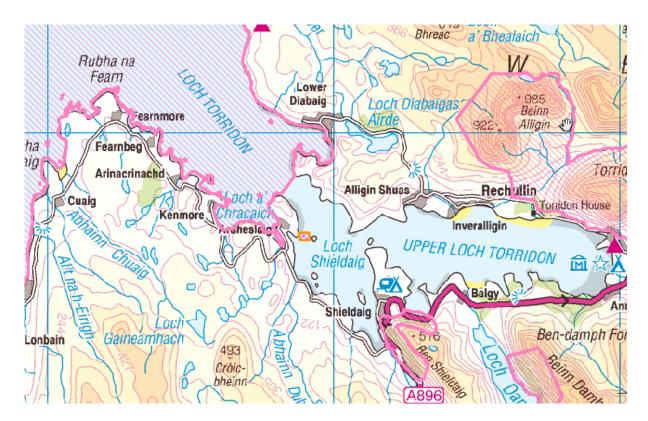
- Removal of non-target and target species (i.e. entanglement of harbour porpoises in fishing gears and removal of their prey species).
- Contaminants (e.g. through effects on water quality and bioaccumulation of contaminants that in turn affects the survival and productivity rates of harbour porpoises).
- Underwater noise (e.g. from acoustic surveys).
- Death or injury by collision (predominantly in relation to collision with various types of fast moving vessels from commercial shipping to personal leisure craft and potentially from tidal turbines).

These four pressures were used as the basis for undertaking our assessment of risk in terms of achieving the Conservation Objectives for harbour porpoise. Further information on feature sensitivity can be found in the UK Dolphin and Porpoise

## Annex 2. SNH's advice to support management for Inner Hebrides and the Minches SAC for activities which are considered capable of affecting harbour porpoise.

Where a cell is coloured grey this indicates that management is already in place and/or no additional management is considered to be required to achieve the Conservation Objectives. The potential for cumulative effects (e.g. related to noise, disturbance and collision) needs to be taken into account. An \* has been used to highlight those activities to which the advice under *Boat use associated with both commercial and recreational activities* also applies.

Activities considered	Advice to support management					
capable of affecting the protected features	Harbour Porpoise					
Aquaculture*	Reduce or limit pressures					
	Minimise the risk of disturbance <sup>7</sup> to harbour porpoise relating to the use of ADDs at finfish aquaculture sites. This should include adoption of existing best practice <sup>8</sup> e.g. development of ADD deployment plans as part of the licence process. These plans should include consideration of the potential for cumulative impacts of noise. In areas of higher cumulative risk (e.g. areas with larger numbers of fish farms within straits, sounds and embayments where ADD use may restrict access) a more restricted use of ADDs should be considered.					



Boundary of the SAC relative to the proposal (orange box)

#### ADD Use

The SAC does not extend into Loch Shieldaig which indicates that it is not a regular part of the harbour porpoise habitat. However, the noise energy from certain ADD devices is audible to the porpoise and could result in its pattern of behaviour and movements to be altered as a result particularly if the noise were continuous for extended periods of time. Although dissuasion of porpoise from the upper reaches of Loch Torridon and the boundaries of the SAC might not represent a severe impact, it should be avoided in respect of the conservation objectives of the SAC.

The Council agrees with SNH that the submitted ADD deployment plan so long as it is secured by condition and adheres to the submitted details is unlikely to result in an AESI.

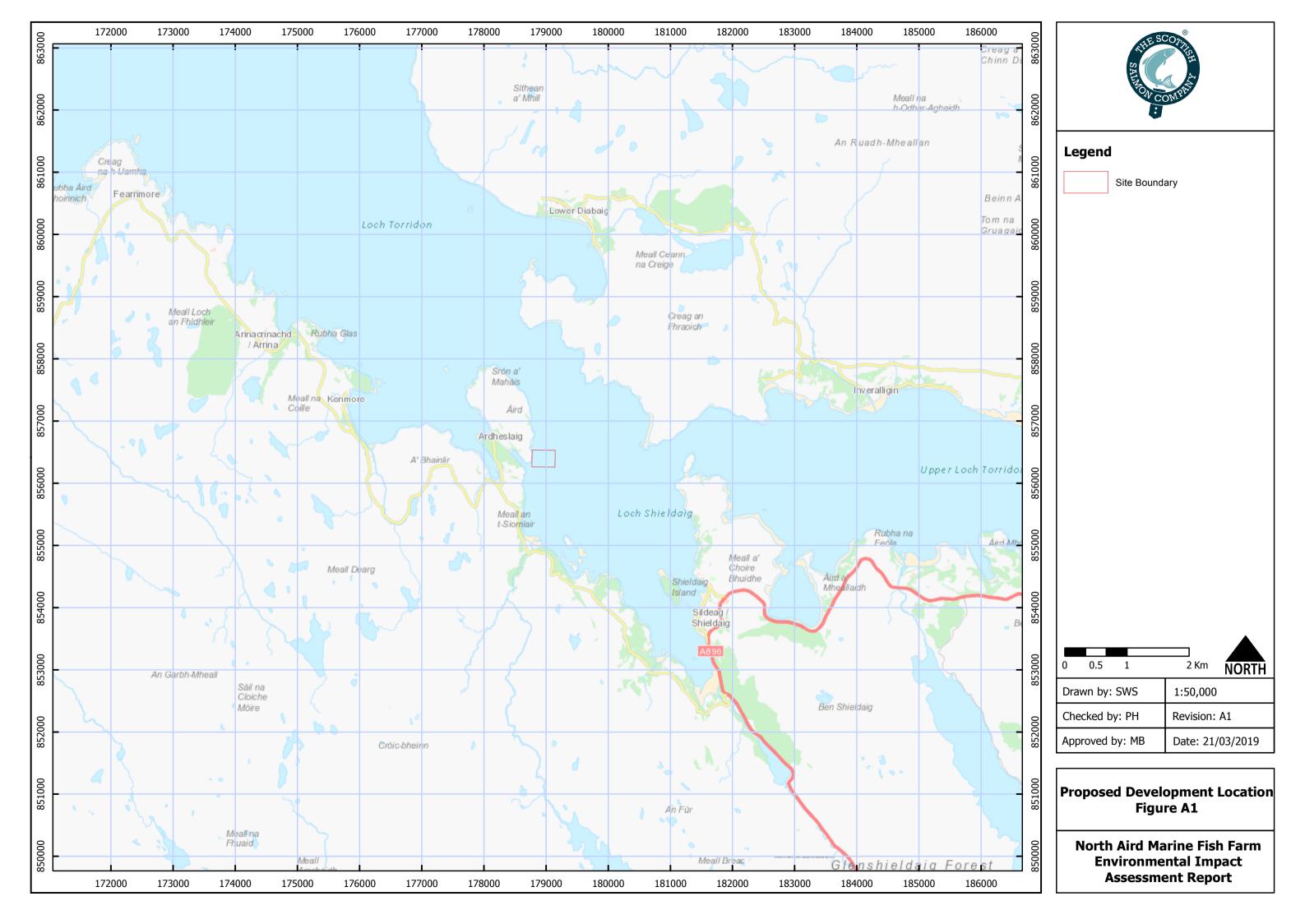
To ensure that this remains the case over the lifetime of the permission, the ADD deployment plan condition must also require monitoring and review adaptive management clauses.

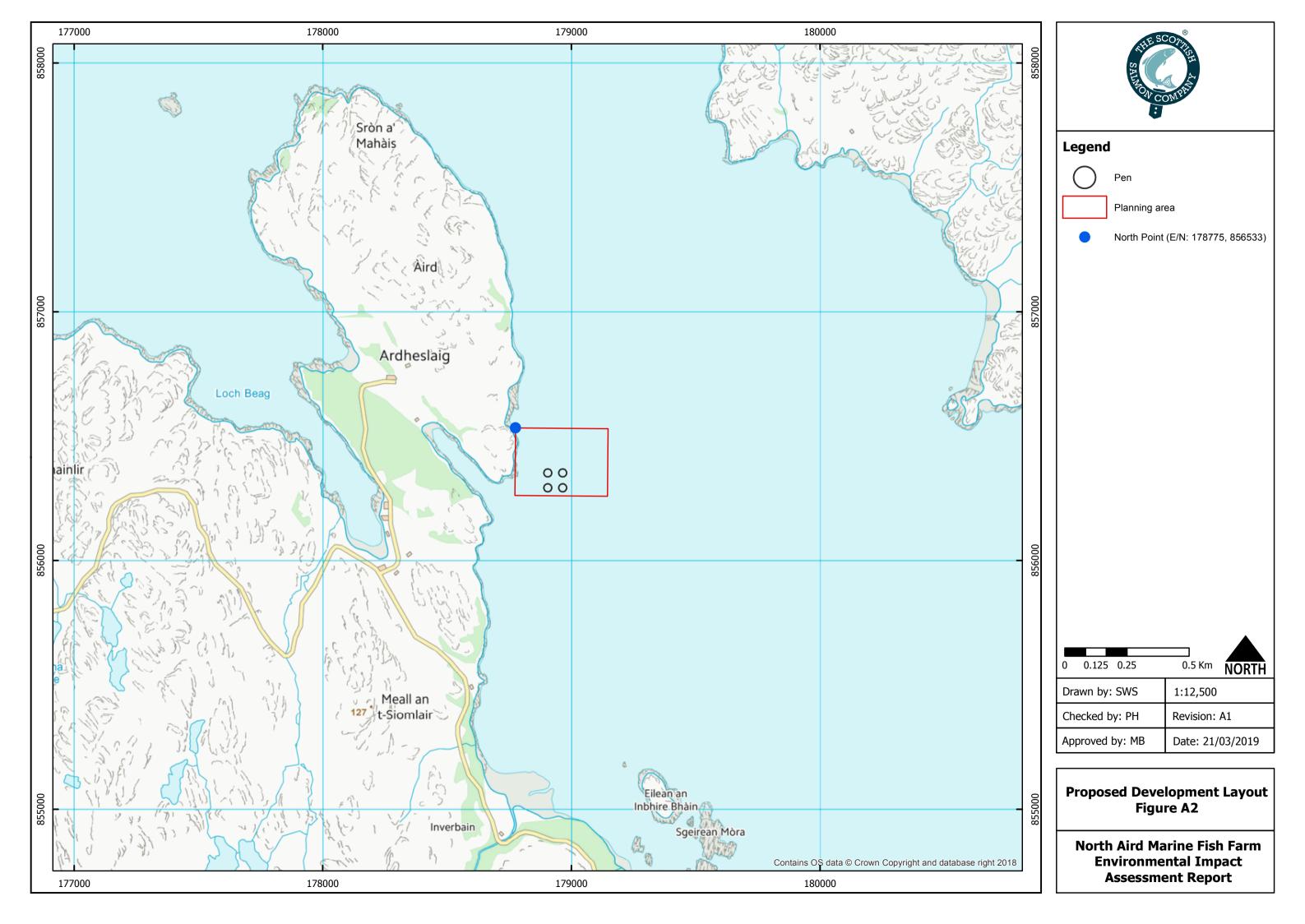
#### Conclusion

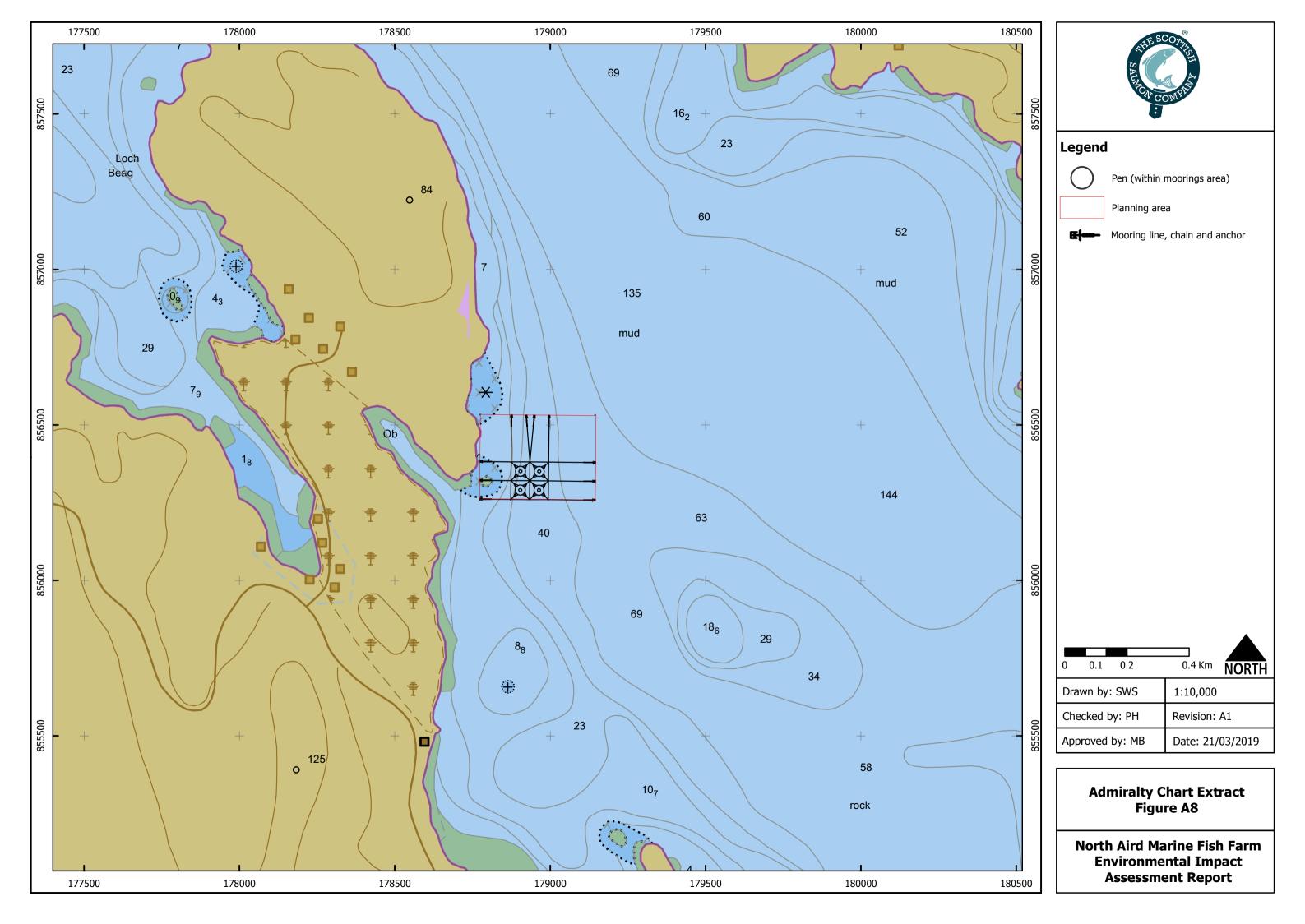
The proposed development is unlikely to result in an adverse effect on site integrity so long as ADD usage is made the subject of a condition.

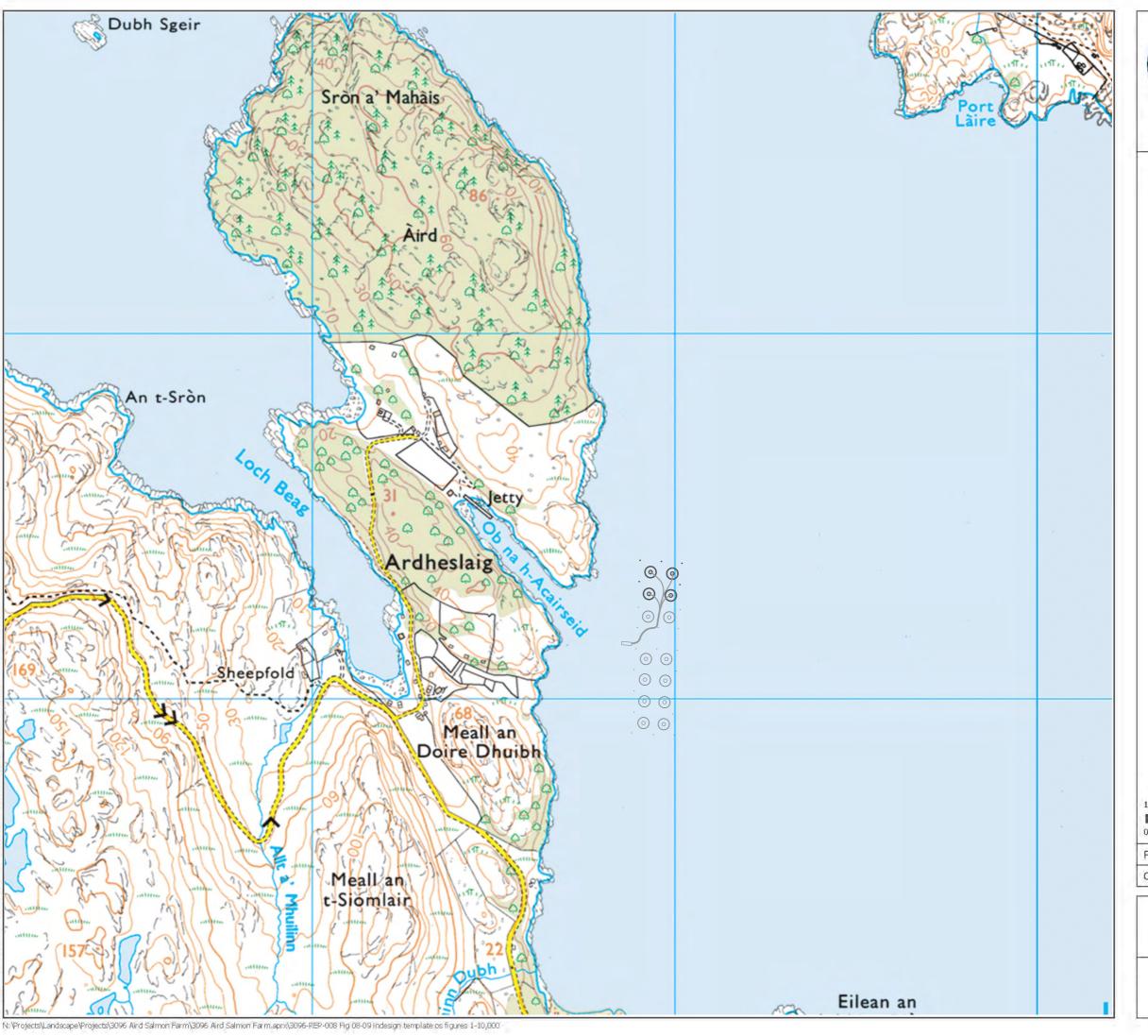
#### Decision

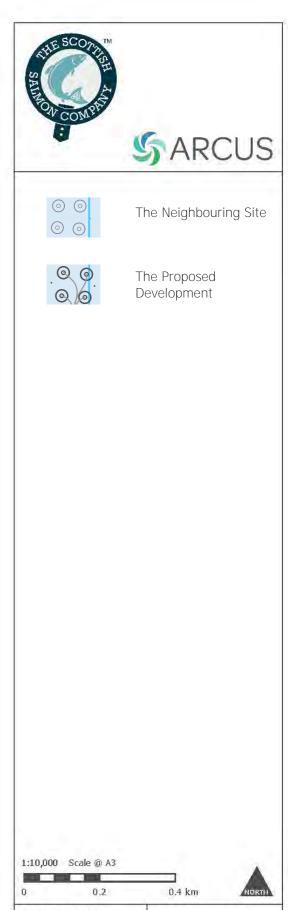
On the basis of this appraisal, it is concluded that the proposal will not have an adverse effect on the integrity of the Inner Hebrides and the Minches Special Area of Conservation (SAC).









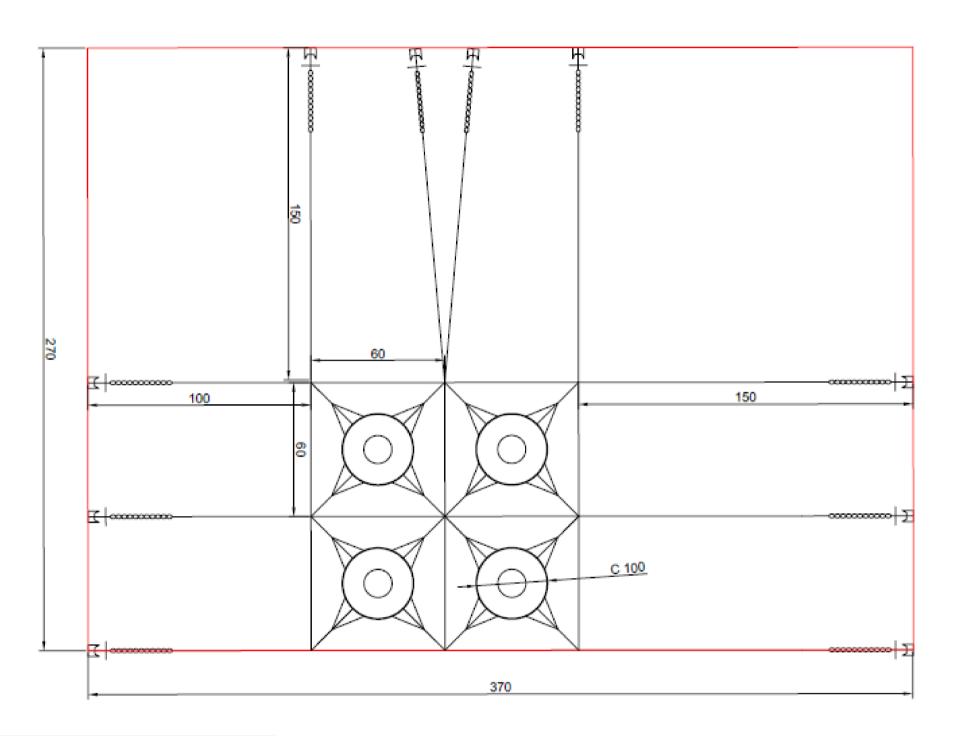


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 Checked By: MT
 Date: 21/03/2019

Site Context Figure 3

North Aird Marine Fish Farm, Seascape Landscape & Visual Impact Assessment



Proposed grid co-ordinates						
	Latitude Longitude Easting Northin					
NW Corner	57° 32.598 N	005° 41.801 W	178875	856379		
NE Corner	57° 32.602 N	005° 41.680 W	178996	856380		
SE Corner	57° 32.537 N	005° 41.674 W	178995	856259		
SW Corner	57° 32.533 N	005° 41.795 W	178874	856258		
	Propos	ed planning area				
NW Corner	57° 32.678 N	005° 41.909 W	178775	856533		
NE Corner	57° 32.688 N	005° 41.539 W	179145	856531		
SE Corner	57° 32.541 N	005° 41.524 W	179145	856258		
SW Corner	57° 32.530 N	005° 41.895 W	178774	856258		



#### Legend

Pen (within moorings area)



Planning area



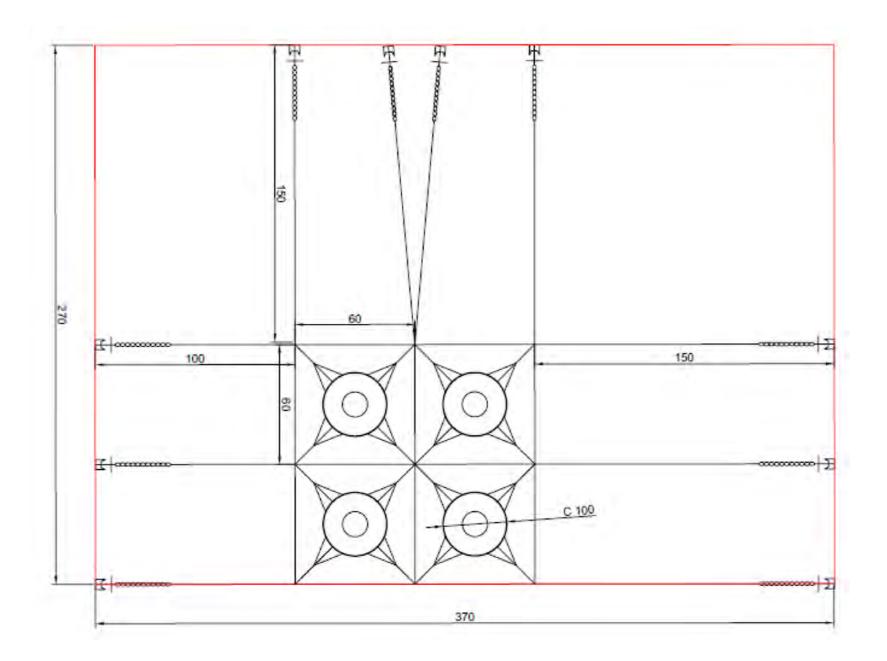
Mooring line, chain and anchor

All dimesnsions given in metres

	NOKIH
Drawn by: SWS	Not To Scale
Checked by: PH	Revision: A1
Approved by: MB	Date: 21/03/2019

#### **Schematic Diagram** Figure A7

**North Aird Marine Fish Farm Environmental Impact Assessment Report** 





**\$**ARCUS

#### Legend

Pen (within moorings area)



Planning area



Mooring line, chain and anchor

NTS

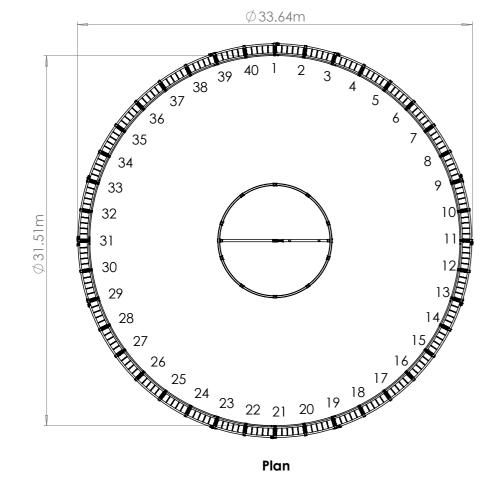


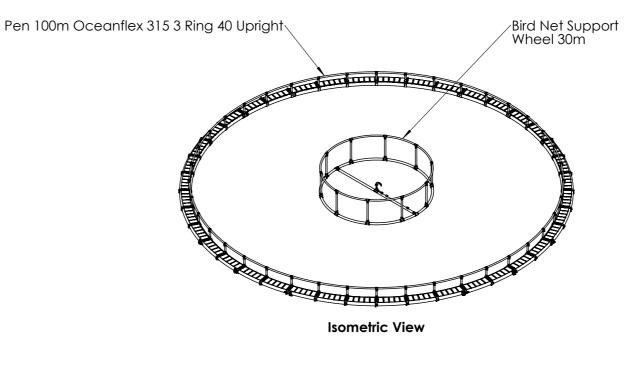
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> Details of The Proposed Development Figure 6

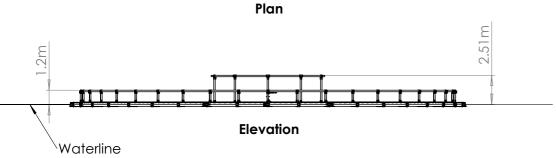
North Aird Marine Fish Farm, Seascape Landscape & Visual Impact Assessment

3rd Angle Proj	ection —		If In Doubt Ask ~ Do Not Scale		Not Scale		nensions are in mm	Date	Rev	Details of Revision
Job Number	Cu	ıstomer		Date	Base Pipe Ty	/pe	Uprights per Pen			
					315SDR17	7	40			





Description	Qty
Flotation Rings 315mm SDR17 x 100m	3
PS Infill Inner Ring x 100m	1
Base Units 315mm	40
Stanchion Uprights 125mm SDR7.4 c/w Retainer Pins	40
Handrail Pipe 125mm SDR 7.4 x 100m	1
EF Base Unit Stops	88
Oceanflex 315mm Modular Decking System x 100m	1
Mooring Sling Red 5Ton x 4.3m Duplex	12
Pen Serial Plate	1
Bird Net Support Wheel 30m c/w Central Feed Bar	1



Fusion Marine Limited Barcaldine By Oban Argyll PA37 1SE www.fusionmarine.com **Tolerances** 

Unless otherwise specified

 $X = \pm 0.50$   $X^{\circ} = \pm 0^{\circ}30'$   $X.X = \pm 0.20$   $X^{\circ}X' = \pm 0^{\circ}10'$  $X.XX = \pm 0.10$ 

Title: Oceanflex315 3 Ring 100m Pen 40 Uprights c/w Bird Net Support Wheel 30m
--

Material: PE 100		Finish: Black	
Drawn:R.Edwards	Scale 1:250 @ A3	Drawing No.	Rev
Date: 22/10/2018	Reference Drgs		
Checked	OP1003D40 (1)	OP1003D40/BNSW30CB (1)	
Verified	BNSW30CB (1)		



NTS



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 Ref: 3096-LAN-007

 Checked By: MT
 Date: 21/03/2019

Example of proposed Fin Fish Pen Figure 7

North Aird Marine Fish Farm, Seascape Landscape & Visual Impact Assessment