

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

NB: The 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 Parts 3 and 4 and any other information supplied will not be released except as may be required by law, including the Freedom of Information Act 1997 as amended.

USE BLOCK CAPITALS IN BLACK INK PLEASE

For Office Use

Application Ref. No. T32/27

Date of Receipt (Dept. Stamp):



Type of Applicant (tick one)	
Sole Trader	<input type="checkbox"/>
Partnership	<input type="checkbox"/>
Company	<input checked="" type="checkbox"/>
Co-Operative	<input type="checkbox"/>
Other	Please specify- <input type="checkbox"/>

PART 1: PRELIMINARY DETAILS

Applicant's Name(s)
1. Irish Mussel Seed Company Limited Address: 22 Church View, Arklow, County Wicklow.
2. Address:
3. Address:
4.

PART 1: PRELIMINARY DETAILS

Contact in case of enquiries (if different from above)	
Contact Name	Kate Dempsey
Organisation Name (if applicable)	Irish Mussel Seed Company Limited
Address	22 Church View, Arklow, County Wicklow.

TYPE OF APPLICATION – please indicate relevant type of application
 This Application Form is valid for each type of application - *See Guidance Note 3.1*

(i) Aquaculture Licence	<input checked="" type="checkbox"/>
(ii) Trial Licence	<input type="checkbox"/>
(iii) Foreshore Licence, if Marine Based	<input checked="" type="checkbox"/>
(iv) Review of Aquaculture Licence	<input type="checkbox"/>
(v) Renewal of Aquaculture Licence	<input type="checkbox"/>

TYPE OF AQUACULTURE

See Guidance Note 3.2

Indicate the relevant type of application with a tick.

(i) **MARINE-BASED**

Finfish Go to Parts 2.1 and 2.1A

(ii) Shellfish *Subtidal* Go to Parts 2.2 and 2.2A

Intertidal Go to Parts 2.2 and 2.2A

Seaweed/Aquatic Plants/Aquatic Fish Food Go to Parts 2.3 and 2.3A

(ii) **LAND-BASED**

Finfish Shellfish Go to Parts 2.4 and 2.4A

Aquatic Plants Aquatic Fish Food Go to Parts 2.4 and 2.4A

(iii) TRIAL LICENCE

Go to appropriate Parts as above and to Part 2.5.

PART 2: DETAILS RELATING TO THE PROPOSED AQUACULTURE

PROJECT

2.2 MARINE-BASED SHELLFISH AQUACULTURE

When filling out this section refer also to 2.2A and Guidance Note 3.3 for information on Conditions and Documents required with this application type

Proposed Site Location

- (i) Bay: Between Clogga Bay and Kilmichael Point
- (ii) County: County Wicklow
- (iii) OS Map No: Admiralty Chart 1787 'Republic of Ireland – East Coast, Carnsore Point to Wicklow Head'
- (iv) Co-ordinates of Site: (please specify coordinate reference system used e.g. Irish Grid (IG) or Irish Transverse Mercator (ITM) or Latitude/Longitude [in which case specify whether ETRS89 or WG84 etc.] The following coordinates are for the site in which the structures will be placed.

Easting	Northing
325869.942	168715.382
326469.821	168715.372
326470.076	167615.265
325870.136	167615.280

UTM 29	UTM 29
693238.967	5848884.596
693838683	5848892.921
693854.221	5847793.117
693254.445	5847784.797

Lat	Long
52 45 18.72	6 8 11.1474
52 45 18.216	06 7 39.18
52 44 42.65	6 7 40.692
52 44 43.151	6 8 12.6594

The following are the coordinates of the site that include an empty space outside of the structure site and is allocated as a working space i.e. if boats are to come alongside to collect mussel at sea. Images of this are attached along with scale drawing.

Lat	Long	Easting	Northing
52° 45' 19.35" N	6° 8' 11.15" W	325870	168735
52° 45' 19.37" N	6° 7' 39.17" W	326470	168735
52° 44' 40.57" N	6° 7' 39.18" W	326470	167535
52° 44' 40.56" N	6° 8' 11.15" W	325870	167535

(v) Size of Site (hectares):

66.6 Hectares (Inclusive of working space - 72 Hectares)

(vi) Species (common and scientific name) and whether native or non-native species: (see Guidance Notes 3.3.1)

Blue Mussel – Mytilus Edulis – Native Species

(vii) Whether production will be sub-tidal or inter-tidal?

Sub-tidal

(viii) Please supply details of (a) source of seed e.g. wild hatchery and location and (b) means of collection and introduction to culture.

Native and naturally occurring mussel seed. There will be no introduction of individuals

NB Importation of seed into the State or movement of seed within the State requires notification to the Marine Institute as per the Fish Health Authorisation Regulations – See Guidance Notes Section 6

(ix) Method of culture (rope, trestles – intensive; bottom – extensive; other)

Rope grown mussel seed – Longlines – New Zealand method

(x) Proposed number of lines/ropes/trestles as per site layout drawing

As per layout drawing there will be a total of 124 lines. Consisting of 96 operational lines and 28 breaker lines (which will not be spat collectors). There will be three phases of installation each of which will provide an additional 32 lines. (Set out in attached drawings). All plans for phased installation are dependent on the grant of licence. Although plans of phased installation have been drafted and are preferred, IMSC wish to be permitted to increase or decrease the number of long lines per phase.

(xi) Proposed Production Tonnage:

Year 1	0	Year 2	1280	Year 3	2560	Year 4	3840	Year 5	3840
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Estimated tonnage based upon 40 T per unit and in line with industry standard research.

(xii) (a) Please outline the reasons for site selection:

There are a number of reasons for site selection:

- 1. Irish Mussel Seed Company has identified a site which after considerable testing is showing prolific mussel larval presence. Wicklow has historically supplied dredged seed to the mussel growing industry.**
- 2. Located within easy access to Arklow harbour.**
- 3. This site has low impact on other sea users (confirmed with the Commissioner of Irish Lights)**
- 4. It is not a historical area of known bottom seed collection.**
- 5. Bathymetre.**
- 6. Shelter from Banks which lie outside the site.**
- 7. Current Speeds (as per attached current hydrography report)**

(b) If using trestles please outline the physical characteristics of the site which make it suitable for using trestles

N/A

(xiii) Is it intended that the product is for direct human consumption or half grown? Please specify

Not for direct human consumption. Half grown.

(xiv) How will the visual impact issues of the flotation devices for the proposed application be addressed?

The buoys which are visible above water will be coloured battleship grey so that the visual impact is reduced. The overall impact of the proposed area will be low and any impact is mitigated by the distance of the farm from the shore and the degree of buoy submergence in the water.

(xv) Is the site located in Designated Shellfish Waters Area? (Refer to Guidance Note 3.3.2)

Yes No

If yes give details.

If **no** outline the reasons why you believe the site suitable for the proposed aquaculture, notwithstanding its location outside Designated Shellfish Waters Area?

Outside of the reasons set out in xii(a) for this site selection I believe this site to be suitable for the proposed aquaculture for the following reasons;

The east coast of Ireland has less protected areas in which to carry out aquaculture than the West coast. This however, with new technology should not preclude the East coast from benefiting from this industry. The site chosen benefits from the protection of banks (illustrated on maps attached) and offers an opportunity for the East Coast to engage in Aquaculture in a meaningful way. The socio-economic benefit will not only be felt in the fishing community of Arklow, which needs increased industry and diversity but in areas e.g. Wexford, Carlingford Lough (Potential Market).

The Proposed site is not located in an area that would result in any significant conflicts with other sea users. This has been confirmed with the commissioner of Irish Lights when traffic over the proposed site was investigated.

IMSC consider the proposal to be a commercially viable use of space.

The location allows IMSC the ability to collect spat close to ongrowing farms and is advantageous as it allows reduced handling time, potentially reduced mortality of translocated spat, reduced transport costs, reduced biological risks and greater confidence between supply of spat and ongrowing operations on the East Coast. These efficiencies also make the area suitable.

The supply of sustainable spat will become increasingly critical for the future of the industry as the gap between supply and demand widens. It will allow a sustainable source of mussel seed to an industry which has been prevented from expanding because of continuous lack of reliable seed supply.

A consistent sustainable seed source may, over time, result in less dependence on wild seed sourced via dredging and benefit the seabed habitats in seed sourcing areas.

(xvi) Has the area been classified under Food Safety Legislation? (For Bivalve Molluscs) What is the current classification of the area for the proposed species applied for?

Not Classified

(xvii) Is the site located in/adjacent to a sensitive area e.g. SPA (Special Protection Area) or SAC (Special Area of Conservation) i.e. a Natura 2000 site? (Refer to Guidance Note 3.3.1- Natura 2000 sites)

No

(xviii) Are there known sources of pollution in the vicinity e.g. sewage outfall?

No

(xix) Methods used to harvest the shellfish and details of any subsequent processing of shellfish.

IMSC intend to employ the New Zealand continuous long line system. Details of all equipment are set out in Equipment Booklet.

(xx) Describe any proposed purification facilities to be used:

None

(xxi) What are the main predators of the species to be cultivated?

Starfish, Crab and Whelk

(xxii) Describe the method(s) which will be used to control them

IMSC intend to harvest mussel from suspended long lines. The droppers will be two meters from the sea bottom which will reduce the amount of predators in comparison with traditionally dredged mussel seed.

See Part 2.2A for details of documentation to be included with this application type

(to be included separately with a Licence Application for a new site or for a renewal or review of an existing Licence)

1. **An appropriate Ordnance Survey Map (recommendation is a map to the Scale of 1:10,000/1:10,560, i.e. equivalent to a six inch map).** Note: The proposed access route to the site from the public road across tidal foreshore must also be shown on the map.
2. **Scale drawing of the structures to be used and the layout of the farm.**
The proposed site drawings must illustrate all site structures above and below the water including mooring blocks. (recommended scales normally 1:100 for structures and 1:200 for layout) (See Guidance Note 3.3.2)
3. **The prescribed application fee (See Guidance Note Section 4)**
4. **If the applicant is a limited Company within the meaning of the Companies Act 1963. as amended, the Certificate of Incorporation and Memorandum and Articles of Association**
5. **If the applicant is a Co-operative, the Certificate of Incorporation and Rules of the Co-operative Society**
6. **Environmental Impact Statement (if required) in certain cases- See Guidance Notes Section 3.3.1**
7. **Alien Species dossier (where required) – See Guidance Notes Section 3.3.1**

NOW COMPLETE PARTS 2.6, 3, 4 AND 5 PLEASE

**2.6 Employment, Qualifications, Experience, etc
TO BE FILLED IN BY ALL AQUACULTURE APPLICANTS**

- (i) Please provide details of experience/qualifications of the applicant and any key personnel which are relevant to the aquaculture now proposed:

Kate Dempsey

- **Currently completing a Higher Diploma in Business in Aquabusiness with I.T Carlow (Completed July 2018)**
- **Certificate of proficiency in Personal Survival Techniques on board ship**
- **Certificate of proficiency in Elementary First Aid on board ship**
- **Manual Handling**
- **Fetac Certificate in Aquaculture Level 5**
- **Occupational First Aid**
- **Computer Applications**
- **Information Technology Skills**
- **Safety at Sea**
- **Work Boat Handling**
- **Hatchery Production**
- **Shellfish On-growing Operations**

- **Finfish On-growing Operations**
- **Marine Engineering Processes**
- **Communications**
- **Constitutional Law 1&2**
- **Understanding of Irish legal system**
- **Contract Law**
- **Tort Law**
- **Equity and Trusts Law**
- **Labour Law**
- **Law of Evidence**
- **Land Law and Succession**
- **Administrative Law**
- **Judicial Law**
- **Family Law**
- **European Law**
- **Company Law**

Danny Dempsey:

- **Safety at Sea**
- **Work Boat Handling**
- **Certificate of proficiency in Personal Survival Techniques on board ship**
- **Certificate of proficiency in Elementary First Aid on board ship**
- **Over forty years' experience in the fishing industry as a skipper and boat owner in a diverse range of fishing projects.**

Daniel Dempsey Jnr

- **Skippers Ticket- Second Hand Full and a number of years as skipper and boat owner in a range of fishing activities.**
- **Radio Ticket**
- **3 Day Fire Fighting Course**
- **3 Day First Aid Course**
- **Sea Survival & First Aid**
- **Marine Fire Fighting, 5 Day Course**
- **Daniel also owns and runs a construction company and has many qualifications which are not directly related to this project but which will benefit him in running the boat and the day to day operations.**

Companies key to installation (further information in relation to the below companies can be found in Equipment and Maintenance document).

Fielder Marine Services Ltd

Fielder Marine specialise in Screw Anchor installations, farm design, consultancy, underwater maintenance and commercial diving. IMSC will employ on secondment from Fielder Marine, a farm consultant to oversee the correct installation of equipment and the first year of production.

Quality Equipment Limited (New Zealand Rope and Twine)

Gem Floats Limited

(iii) If a new application please provide details of projected employment creation during first four years of the proposed aquaculture project:

FULLTIME JOBS

Year 1:	4	Year 2:	5	Year 3:	6	Year 4:	8

PART TIME JOBS

Year 1:	0	Year 2:	2	Year 3:	2	Year 4:	2
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(iv) In the case of a renewal please provide current and future details:

3. Will the product be processed or packaged?

YES

NO

4. If yes, give details: _____

PART 5: APPLICATION DOCUMENTATION

The following documents are enclosed with this application:

NB: Refer to Guidance Note Section 3.3 – Guidance on Application Documentation

No.	DOCUMENTATION	YES	NO	N/A
1	An appropriate Ordnance Survey Map (recommendation is a map to the scale of 1:10,000/10:10,560, i.e., equivalent to a six inch map)			
2	Scale drawing of the structures to be used and the layout of the farm (recommended scales normally 1:100 for structures and 1:200 for layout)			
3	The prescribed application fee			
4	Environmental Impact Statement (EIS), if required			
4a	Natura Impact Statement (NIS), if required			
5	Water Quality Analysis Report, if appropriate			
6	Decision of Planning Authority under the Planning Acts, if required			
7	Copy of Licence under Section 4 of the Local Government (Water Pollution) Act, 1977 – Effluent Discharge, if required			

PART 5: DECLARATION AND SIGNING

NB: Refer to Guidance Note Section 3.5 and Section 4 - Guidance on Declaration and Signing and Annual Aquaculture and Foreshore Licence Fees

If this is a renewal/review have you met all licence conditions of the existing aquaculture licence? If applicable, explain why you have not complied with all conditions:

I/We hereby declare the information provided in Parts 1, 2, 3 and 4 above to be true to the best of my/our knowledge. I/We enclose an application fee* of € Paid with this application.

Signature(s) of Applicant(s):
(Please state capacity of persons signing on behalf of a Company/Co-op)

Kate Dempsey *Kate J. D.*
Director / Secretary
18106 Mussel Seed Company
Ltd.

Date: 20.2.18

NB All persons named on this licence application must sign and date this application form. Only the existing licence holder(s) can apply for the renewal/review of an Aquaculture Licence.

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

Refer to Guidance Note Section 4 - Guidance on Aquaculture and Foreshore Licence Fees

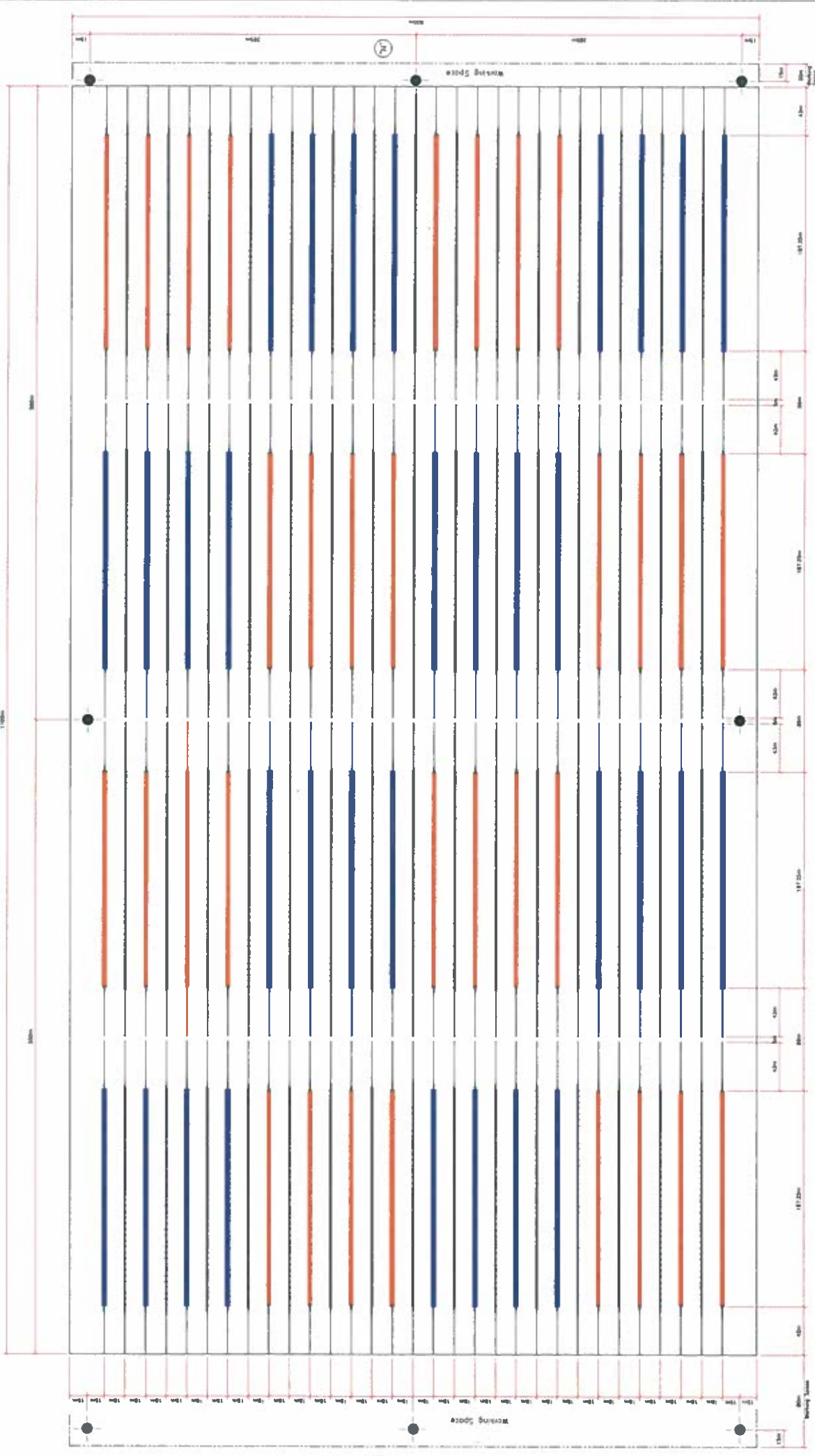


The application form should be forwarded, with the required documents and application fee, to:

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

T32/27

2



Client	Irish Mussel Seed Company Ltd
Project	22.01.2018
Scale	1:100
Drawn	
Checked	
Approved	
Description	Plan 2 - Mussel Seed Installation
Drawn	22.01.2018
Checked	
Approved	



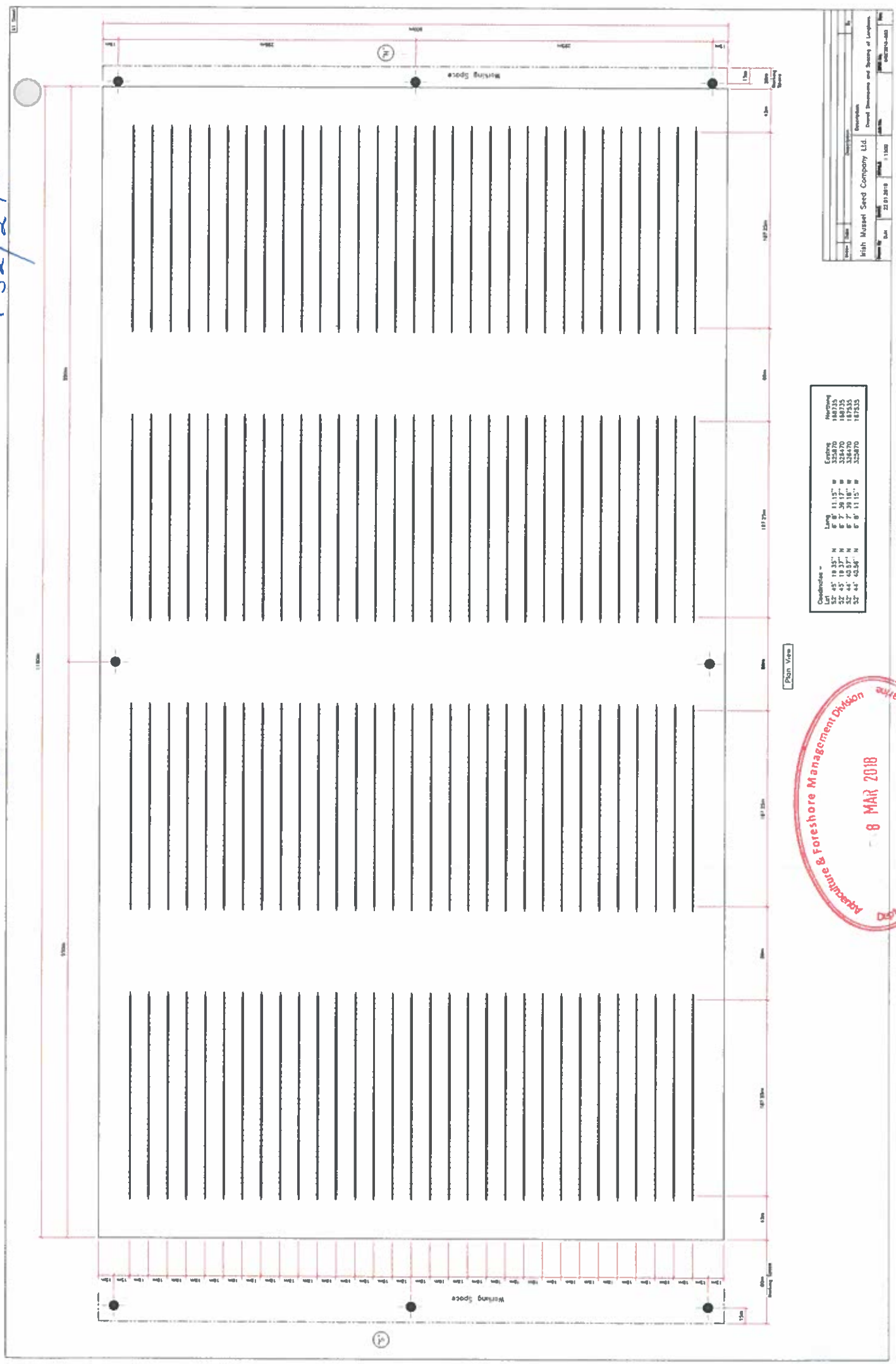
Plan View

1st. Installation █

2nd. Installation █

T32/27.

11.



Coordinates =	Long	11.15"	W	Counting	Heighting
Left 45° 18.35" N	6° 8'	11.15"	W	325870	188735
52° 44' 43.5" N	6° 7' 38.18"	W	325870	187535	
52° 44' 43.5" N	6° 8'	11.15"	W	325870	187535

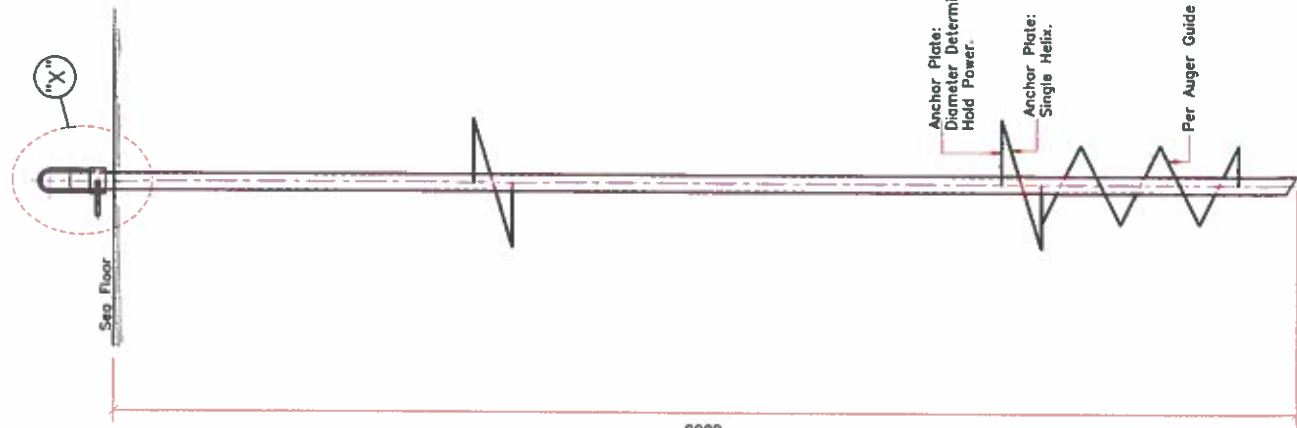
Plan View



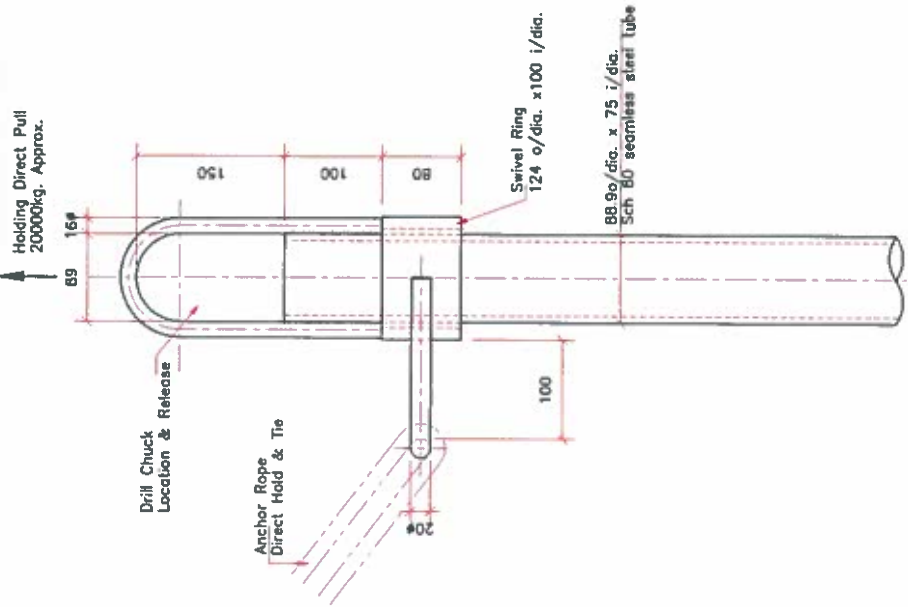
Project No.	23.01.2018	Scale	1:1000
Date	23.01.2018	Author	1300
Description Overall Dimensions and Spacing of Longlines			
Client Irish Mussel Seed Company Ltd.			
Drawing No. 002/2018-003			

T 32/27

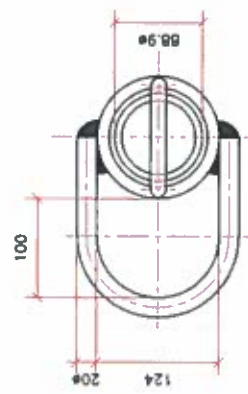
ix.



Elevation
Screw Anchor Arrangement



Elevation



Plan View

Enlarged Ringed Detail "X"

Description of Anchor:
 Short Size 89o/dia. 75 i/dia. (Schedule 80 Seamless Line Pipe)
 Non-Chinese Origin

Structural Capacity Tension 534KN Design 262KN Nominal
 Torque Rating 17,600KN
 KI Torque Correlation Factor 30m-1
 $Q_{ult} = KI \times \text{Installation Torque}$
 Torque Related Capacity Ultimate 405KN Allowable 202.5KN
 Safety Factor 2
 Based on Installation to its Torque Rating, installed in Suitable
 Bearing Strata to Appropriate Depth.



Index	Date	Description	By

Irish Mussel Seed Company Ltd.
 Description: Typical Detail of Screw Anchor.

Drawn By	DATE	SCALE	Job No.	DWG No.	Rev.
DJH	20.02.2018	1:25 1:5		IMSC2018-004	

326000

327000

169000

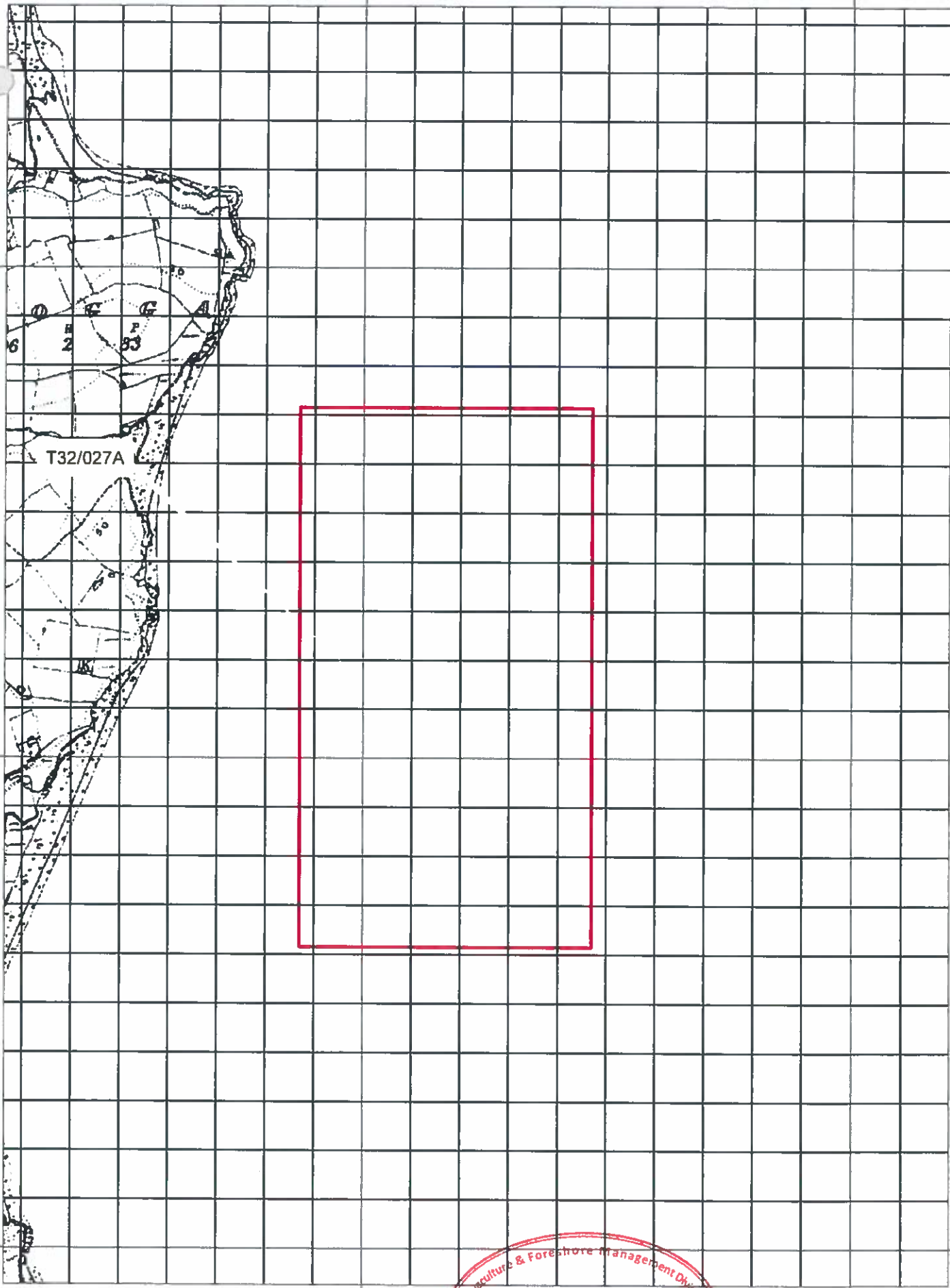
169000

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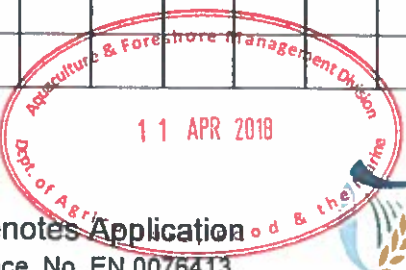
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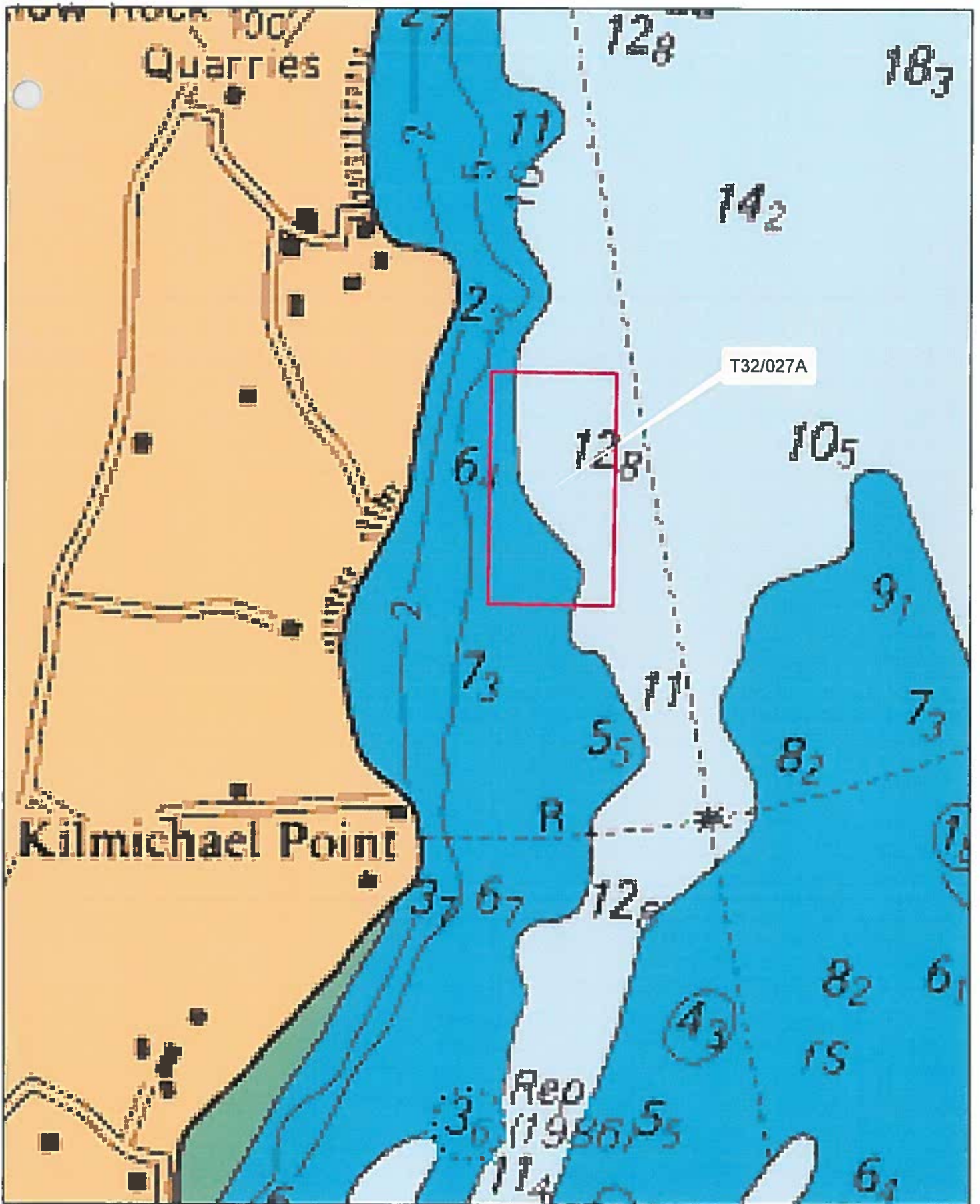


Aqua Culture Sites
 Site_Status
 Application
 Lapsed
 Licensed
 Revoked
 Revisited
 Surrendered
 Withdrawn
 100 Meter Reference Grid

1:10,560
 Sites highlighted in red denotes Application
 Ordnance Survey Ireland Licence No. EN 0076413
 © Ordnance Survey Ireland/Government of Ireland



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



Aqua Culture Sites
 Site Status
 Application
 Lapsed
 Licensed
 Rejected
 Revoked

1:24,000
 Sites highlighted in red denotes Application
 Part of Admiralty Chart No =1787-0
 Not to be used for Navigation



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

1 NO. SITE AT ARKLOW HEAD CO. WICKLOW

Co-ordinates & Area

Site T32/027A (65.996 Ha)

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

325870, 168715 to Irish National Grid Reference point

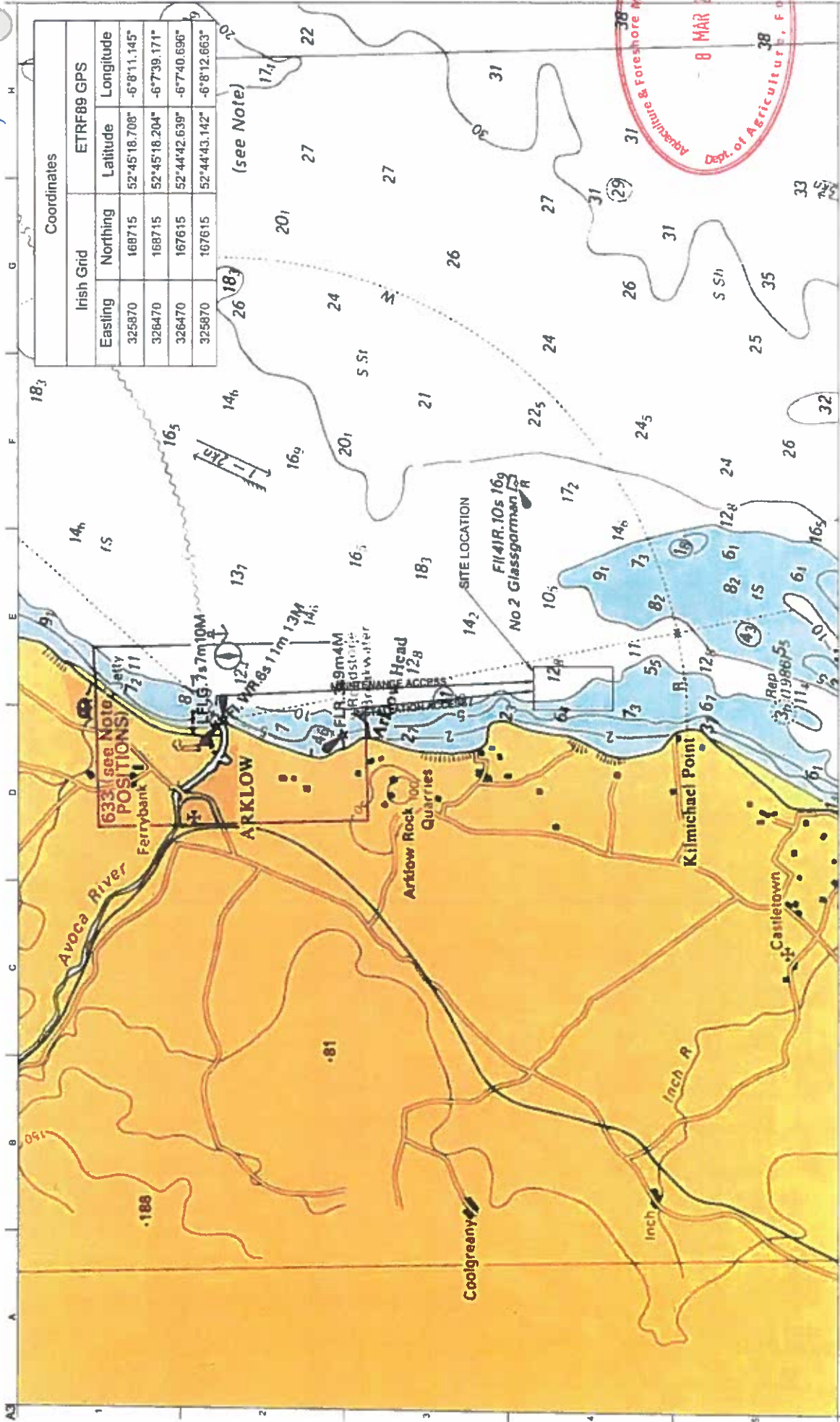
326470, 168715 to Irish National Grid Reference point

326470, 167615 to Irish National Grid Reference point

325870, 167615 to the first mentioned point.



ACCESS/EGRESS ROUVE T32/27



Coordinates		ETRF89 GPS	
Irish Grid	Northing	Latitude	Longitude
Easting	168715	52°45'18.708"	-6°8'11.145"
	168715	52°45'18.204"	-6°7'39.171"
	167615	52°44'42.639"	-6°7'40.696"
	167615	52°44'43.142"	-6°8'12.663"

(see Note)

Department of Agriculture, Food & the Marine
 8 MAR 2018

Notes:
1. Sounding in metres reduced to chart datum

Name		Stephen F. Fisher	
Qualifications			
14	07/11/14	SDF	SF
14	07/11/14	SDF	SF
14	07/11/14	SDF	SF

ARUP
 Arup, 300 Regent Road
 Leamington Spa CV32 9AH, UK
 Tel: +44 (0)1927 533 4155 Fax: +44 (0)1927 533 4155

Site Name: Aquaculture Site Development: Clogga Point
 Client: Irish Mussel Seed Company Ltd

Access to Site

Scale of A3	1:20000
Discipline	Infrastructure
Job No	235409-00
Drawing Title	For Information
Sheet No	14
Drawing No	CSK-003