

Screening for Appropriate Assessment Report and Screening Determination

Maritime Usage Licence Application Foynes Island Marine Site Investigation Surveys

Step 1 - Description of Project/Proposal and local site characteristics

File Reference No	LIC230014
Brief Description of the Project	<p>Shannon Foynes Port Company are proposing to carry out site investigation works at a two locations adjacent to Foynes Island, Foynes, Co. Limerick. See appendix 1 Maritime Usage Licence Map.</p> <p>The site investigation works are required to facilitate the preliminary, detailed design and environmental assessment of a wider project, which will comprise of a new deep-water port at Foynes Island.</p> <p>The site investigation works include both geophysical and geotechnical marine based surveys. The proposed geophysical surveys include Side Scan Sonar, Sub-bottom profiler, Multibeam Echosounder and Magnetometer.</p> <p>The proposed geotechnical surveys will include up to 163 No. cable percussion and/or rotary core Boreholes.</p> <p>The works will take place in 2 phases. Phase 1 works shall constitute a preliminary site investigation with the objective of providing initial ground conditions for the purposes of informing the preliminary geotechnical design of marine structures and bridge piers. Phase 1 is proposed to take place in Q2 2024 and have a duration of 18 weeks in total.</p> <p>Phase 2 will constitute a detailed site investigation with the objective of adding to the data gained from phase 1. Phase 2 is proposed to take place in Q1 2026 and have a duration of 16 weeks in total.</p>
Brief Description of the Site Characteristics	<p>Shannon Foynes Port is situated on the southern shoreline of the Shannon Estuary, 38km west of Limerick City.</p> <p>The port specialises in bulk cargo with typical cargoes including energy products (liquid fuels, coal, etc.), agri-business inputs (feedstuff and fertilisers), recyclable materials, and green-energy components such as wind turbines.</p> <p>The proposed future development project, which comprises of the construction of a new terminal on the northwest side of Foynes Island, will provide significant additional capacity to existing port operations.</p>

Step 2 - Identification of relevant Natura 2000 sites using Source-Pathway Receptor Model and compilation of information on Qualifying Interests and Conservation Objectives. The QIs in bold text are screened in for Stage 2 Appropriate Assessment.

As these works are being undertaken in the marine environment, using the Source-Pathway-Receptor model (OPR 2021), only marine and coastal Natura 2000 sites were considered in this screening process.

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests	Connections (Source-Pathway Receptors)	Qualifying Interests considered further in Screening Y/N	European Site Screened In for stage 2 Appropriate Assessment
Lower River Shannon SAC [Site Code IE002165]	Within SAC boundary	Sandbanks which are slightly covered by sea water all the time [1110] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>) [91E0]	No	No	Yes
		Estuaries [1130] Reefs [1170]	Yes – geotechnical surveys to take place within 1130 Estuaries and adjacent to 1170 Reefs	Yes – possible physical disturbance and habitat loss	

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		<p>Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106]</p> <p>Tursiops truncatus (Common Bottle-nose Dolphin) [1349] Lutra lutra (Otter) [1355]</p>	<p>Yes – geotechnical surveys to take place within SAC boundary</p> <p>Yes – geophysical surveys to take place within SAC boundary</p>	<p>Yes – possible increased suspended sediment concentrations</p> <p>Yes – possible disturbance from underwater noise</p>	
<p>Blasket Islands SAC [Site code IE002172]</p>	<p>117/within Management Unit for Harbour porpoise</p>	<p>Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330]</p> <p>Phocoena phocoena (Harbour Porpoise) [1351] Halichoerus grypus (Grey Seal) [1364]</p>	<p>No</p> <p>Yes - foraging ranges of up to 448km for Grey Seal (Carter et al, 2022)¹ and within Harbour Porpoise Management Unit (JNCC, 2023)²</p>	<p>No</p> <p>Yes – possible disturbance from underwater noise</p>	<p>Yes</p>

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests	Connections (Source-Pathway Receptors)	Qualifying Interests considered further in Screening Y/N	European Site Screened In for stage 2 Appropriate Assessment
Slyne Head Islands SAC [Site code IE000328]	167/Within Management Unit for Bottlenose Dolphin	Reefs [1170]	No	No	Yes
		Tursiops truncatus (Common Bottlenose Dolphin) [1349] Halichoerus grypus (Grey Seal) [1364]	Yes - foraging ranges of up to 448km for Grey Seal (Carter et al, 2022) ¹ and within Bottlenose Dolphin Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	
Slyne Head Peninsula SAC [Site code IE002074]	Within Management Unit for Bottlenose Dolphin	Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Annual vegetation of drift lines [1210] Perennial vegetation of stony banks [1220] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Machairs (* in Ireland) [21A0] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140] European dry heaths [4030] <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210]	No	No	Yes

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests	Connections (Source-Pathway Receptors)	Qualifying Interests considered further in Screening Y/N	European Site Screened In for stage 2 Appropriate Assessment
		<p>Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Alkaline fens [7230] Petalophyllum ralfsii (Petalwort) [1395] Najas flexilis (Slender Naiad) [1833]</p>			
		Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Yes - within Bottlenose Dolphin Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	
West Connacht Coast SAC [Site code IE002998]	Within Management Unit for Bottlenose Dolphin	Tursiops truncatus (Common Bottlenose Dolphin) [1349]	Yes - within Bottlenose Dolphin Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Inishbofin and Inishshark SAC [Site code IE000278]	200	<p>Coastal lagoons [1150] Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030]</p>	No	No	
		Halichoerus grypus (Grey Seal) [1364]	Yes - foraging ranges of up to 448km for Grey Seal (Carter et al, 2022) ¹	Yes – possible disturbance from underwater noise	Yes

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests	Connections (Source-Pathway Receptors)	Qualifying Interests considered further in Screening Y/N	European Site Screened In for stage 2 Appropriate Assessment
Duvillaun Islands SAC [Site code IE000495]	245/Within Management Unit for Bottlenose Dolphin	Tursiops truncatus (Common Bottlenose Dolphin) [1349] Halichoerus grypus (Grey Seal) [1364]	Yes - foraging ranges of up to 448km for Grey Seal (Carter et al, 2022) ¹ and within Bottlenose Dolphin Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Inishkea Islands SAC [Site code IE000507]	250	Machairs (* in Ireland) [21A0] Petalophyllum ralfsii (Petalwort) [1395]	No	No	Yes
		Halichoerus grypus (Grey Seal) [1364]	Yes - foraging ranges of up to 448km for Grey Seal (Carter et al, 2022) ¹	Yes – possible disturbance from underwater noise	
Roaringwater Bay and Islands SAC [Site code IE000101]	Within Management Unit for Harbour porpoise	Large shallow inlets and bays [1160] Reefs [1170] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030] Submerged or partially submerged sea caves [8330] Lutra lutra (Otter) [1355] Halichoerus grypus (Grey Seal) [1364]	No	No	Yes
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests	Connections (Source-Pathway Receptors)	Qualifying Interests considered further in Screening Y/N	European Site Screened In for stage 2 Appropriate Assessment
Rockabill to Dalkey SAC [IE003000]	Within Management Unit for Harbour porpoise	Reefs [1170]	No	No	Yes
		Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	
North Anglesey Marine / Gogledd Môn Forol [UK 0030398]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Bristol Channel Approaches / Dynesfeydd Môr Hafren [UK0030396]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
North Channel [UK 0030399]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes

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West Wales Marine / Gorllewin Cymru Forol [UK 0030397]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Récifs et landes de la Hague [FR2500084]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Anse de Vauville [FR2502019]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Banc et récifs de Surtainville [FR2502018]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Chausey [FR2500079]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes

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Baie du Mont Saint-Michel [FR2500077]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Estuaire de la Rance [FR5300061]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard [FR5300012]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Cap d'Erquy-Cap Fréhel [FR5300011]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Baie de Saint-Brieuc – Est [FR5300066]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes

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Tregor Goëlo Est [FR5300010]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Côte de Granit rose-Sept-Iles [FR5300009]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Nord Bretagne DH [FR2502022]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Baie de Morlaix [FR5300015]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Abers - Côte des legends [FR5300017]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests	Connections (Source-Pathway Receptors)	Qualifying Interests considered further in Screening Y/N	European Site Screened In for stage 2 Appropriate Assessment
Ouessant-Molène [FR5300018]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
Côtes de Crozon [FR5302006]	Within Management Unit for Harbour porpoise	Phocoena phocoena (Harbour Porpoise) [1351]	Yes - within Harbour Porpoise Management Unit (JNCC, 2023) ²	Yes – possible disturbance from underwater noise	Yes
River Shannon and River Foynes Estuaries SPA [Site code IE004077]	Within SPA boundary	Cormorant (Phalacrocorax carbo) [A017] Whooper Swan (Cygnus cygnus) [A038] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Wigeon (Anas penelope) [A050] Teal (Anas crecca) [A052] Pintail (Anas acuta) [A054] Shoveler (Anas clypeata) [A056] Scaup (Aythya marila) [A062] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Curlew (Numenius arquata) [A160]	Yes - geophysical and geotechnical surveys to take place within SPA boundary	Yes - possible visual & above water noise disturbance and disturbance from underwater noise	Yes

European Site Code	Distance from the Proposed Development (km)	List of Qualifying Interests	Connections (Source-Pathway Receptors)	Qualifying Interests considered further in Screening Y/N	European Site Screened In for stage 2 Appropriate Assessment
		Redshank (<i>Tringa totanus</i>) [A162] Greenshank (<i>Tringa nebularia</i>) [A164] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Wetland and Waterbirds [A999]			

Step 3 Assessment of Likely Significant Effects

(a) Identify all potential direct and indirect impacts that may have an effect on the conservation objectives of a European site, taking into account the size and scale of the project	
Impacts	Possible Significance of Impacts (duration, magnitude etc)
Physical disturbance and habitat loss	The works will be temporary in nature so any disturbance will be very temporal and recovery should take place soon therefore.
Disturbance from underwater noise	Possible impacts on Marine Mammals and Birds.
Increased suspended sediment concentrations	Possible temporal impacts on migratory fish species from increased suspended sediment concentrations.
Visual impacts and above water noise disturbance	Possible temporal impacts on River Shannon and River Foynes Estuaries SPA Qualifying Interests.

In-Combination Effects

MARA has developed a stepwise approach for identifying other In-Combination plans and projects (see description on MARA website).

Using professional and scientific judgement, the key steps for assessing cumulative effects are as follows:

1. Defining the Cumulative Effects Spatial Scope (CESS)
2. Defining the Cumulative Effects Temporal Scope (CETS)
3. Impact identification
4. Pathway identification
5. Prediction
6. Identification of Plans or Projects that could act in combination
7. Screening Stage Cumulative Effects Assessment conclusion
8. Managing cumulative impacts - to be carried out as part of Stage 2 AA process

The CESS has been defined as 5 km and the CETS as 7 years. The definition of the CESS is based on acoustic survey equipment effective deterrence ranges as per JNCC Guidance on Assessing the Significance of Noise Disturbance against Harbour Porpoise SACs Conservation Objectives (JNCC, 2020³). And the CETS is the Maritime Usage Licence period.

Using the above 8-step approach, and following a search of relevant databases undertaken on the 13th of March 2024, the below projects have been identified as potential in-combination projects:

Application reference no.	Project	Approximate Distance from MUL Area	Project Status	Cumulative Effects
18301561	Capacity Extension at Foynes Port	0km	Approved but not completed - permission granted 12/12/18	Spatial overlap with Shannon Foynes Maritime Usage Licence Area. Within the CESS. Possible temporal overlap.
2360011	Shannon Foynes Port Development	0km	Proposed – permission submitted January 2023	Spatial overlap with Shannon Foynes Maritime Usage Licence Area. Within the CESS. Possible temporal overlap.
22742	Shannon Foynes Port Development	0km	Proposed – permission submitted July 2022	Spatial overlap with Shannon Foynes Maritime Usage Licence Area. Within the CESS. Possible temporal overlap.
FS006975	Shannon Foynes Port Company maintenance dredging	0km	Approved but not completed - permission granted 03/03/2023	Spatial overlap with Shannon Foynes Maritime Usage Licence Area. Within the CESS. Possible temporal overlap.
S0009-03	Shannon Foynes Port Company Dumping at Sea Permit	0km	Approved but not completed - permission granted 21/12/2020	Spatial overlap with Shannon Foynes Maritime Usage Licence Area. Within the CESS. Possible temporal overlap.
LIC230004	Aughinish Alumina Maintenance Dredging	3.5km	Proposed – MUL licence submitted 30/11/23	No Spatial overlap with Shannon Foynes Maritime Usage Licence Area. Within the CESS. Possible temporal overlap.
PA91.312146 and 318302	Aughinish Alumina Bauxite Extension	3.5km	Approved - permission granted 31/08/22	No Spatial overlap with Shannon Foynes Maritime Usage Licence Area. Within the CESS. Possible temporal overlap.

The following plans, related to the development of the maritime environment were also identified:

- The Climate Action Plan 2023
- River Basin Management Plans (RBMP)
- Designated Maritime Area Plans (DMAPs)

These plans promote sustainable development in the maritime environment and particularly Ireland’s Climate Action Plan’s renewable electricity target of 80% of energy generated from renewable electricity sources by 2030.

Likely significant in-combination effects between this project and the above listed 6 projects and 3 plans on the conservation objectives of Natura 2000 sites considered in this report cannot be excluded at this stage.

(b) Describe any likely changes to the European site:	
Reduction or Fragmentation of habitat area	Disturbance to Annex I Habitats cannot be excluded at this stage.
Disturbance to Qualifying Interest species	Disturbance to Annex II species and Birds cannot be excluded at this stage.
Changes in key indicators of conservation status value	Not likely
Changes to areas of sensitivity or threats to QI	Disturbance to Annex I Habitats, Annex II species and Birds cannot be excluded at this stage.
Interference with the key relationships that define the structure or ecological function of the site	Not likely

Were mitigation measures considered during the screening process?

No

Step 4 Screening Determination Statement

The assessment of significant effects:



Having regard to:

- The nature and scale of the proposed development
- The distance to the nearest European site
- The potential for in-combination effects with other plans and projects
- Possible physical disturbance and habitat loss
- Possible increased suspended sediment concentrations
- Possible disturbance and displacement from underwater noise
- Possible disturbance and displacement by visual impacts
- Possible displacement by above water noise

Having considered the legal framework applicable to Appropriate Assessment it was concluded that the proposal by Shannon Foynes Port Company to carry out site investigation works will require Appropriate Assessment as it cannot be excluded on the basis of objective scientific information, following screening that the proposed activities, individually or in combination with other plans or projects, will have a significant effect on a European Site

Conclusion

	Tick as appropriate	Recommendation
(i) It is clear that there is no likelihood of significant/possible effects on a European site		

(ii) It is uncertain whether the proposal will have a significant/possible effect on a European site	<input checked="" type="checkbox"/>	Proceed to Stage 2 Appropriate Assessment
(iii) Significant effects are likely		
Signature and Date of Recommending Officer	 Mary Hegarty, 19 th March 2024	
Signature and Date of Decision Maker	 Karen Creed, 19 th March 2024	

¹ Carter et al, 2022 - Carter et al, 2022. Sympatric Seals, Satellite Tracking and Protected Areas: Habitat-Based Distribution Estimates for Conservation and Management, *Frontiers in Marine Science*, v9 2022.

² JNCC 2023 - IAMMWG. 2023. Review of Management Unit boundaries for cetaceans in UK waters (2023). JNCC Report 734, JNCC, Peterborough, ISSN 0963-8091.
<https://data.jncc.gov.uk/data/b48b8332-349f-4358-b080-b4506384f4f7/jncc-report-734.pdf>

³ JNCC, 2020 - Guidance for assessing the significance of noise disturbance against Conservation Objectives of harbour porpoise SACs (England, Wales & Northern Ireland). JNCC Report No. 654

Appendix 1

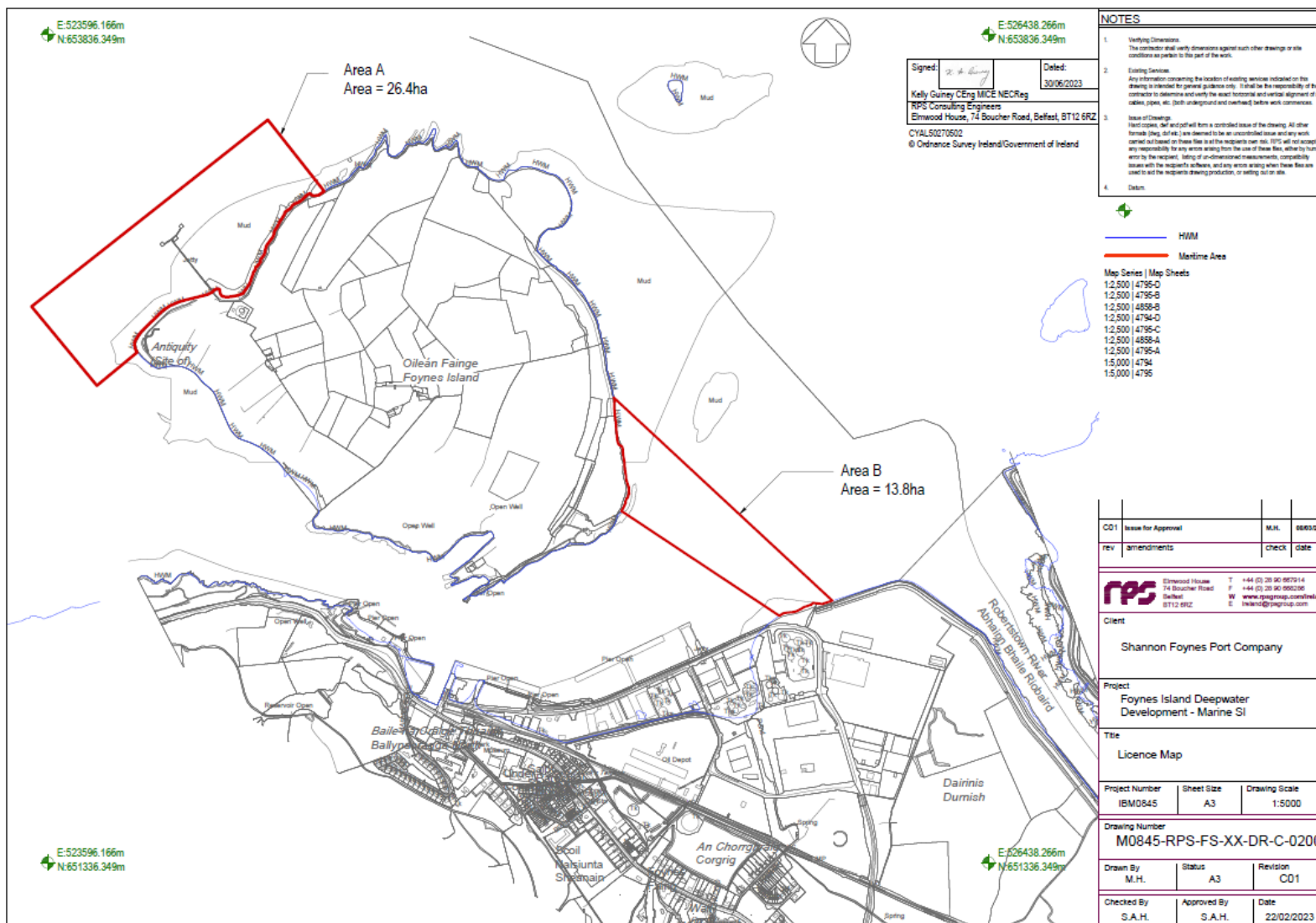


Figure 1 - Maritime Usage Licence Map