

Marine Licence Application for Dredging and Sea Disposal

Version 1.0

Marine (Scotland) Act 2010

Acronyms

Please note the following acronyms referred to in this application form:

BPEO	Best Practicable Environmental Option
MHWS	Mean High Water Springs
MMO	Marine Mammal Observer
MPA	Marine Protected Area
MS-LOT	Marine Scotland – Licensing Operations Team
PAM	Passive Acoustic Monitoring
SAC	Special Area of Conservation
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
WGS84	World Geodetic System 1984

Explanatory Notes

The following numbered paragraphs correspond to the questions on the application form and are intended to assist in completing the form. These explanatory notes are specific to this application and so you are advised to read these in conjunction with the Marine Scotland Guidance for Marine Licence Applicants document.

1. Applicant Details

The person making the application who will be named as the licensee.

2. Dredging Contractor Details

The person whose activities produce the substance(s) or object(s) to be dredged and/or intended for sea disposal (e.g the dredging contractor).

3. Agent Details

Any person acting under contract (or other agreement) on behalf of any party listed as the applicant and having responsibility for the control, management or physical deposit or removal of any substance(s) or object(s).

4. Payment

Indicate payment method. Cheques must be made payable to: The Scottish Government.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

5. Application Type

Indicate if the application is for a new dredging site or a site that has previously been dredged. Provide the existing or previous consent/licence number, expiry date and quantity (in wet tonnes) dredged under the consent/licence up to a stated date if applicable.

6. Dredging and Sea Disposal Details

- (a) Give a brief description of the dredging and sea disposal operation.
- (b) Provide the proposed start date of the project. The start date will not be backdated, since to commence a project for which a licence has not been obtained will constitute an offence, which may result in appropriate legal action. A licence is normally valid for the duration of the project but not exceeding 3 years. If a project will not be completed before a marine licence lapses, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing work at least 14 weeks prior to the expiry date of the licence. **Target duration for determination of a marine licence application is 14 weeks.**
- (c) Provide the proposed completion date of the project.

- (d) Describe the location of the proposed works. Include a list of the latitude and longitude co-ordinates (WGS84) of the boundary points for each dredge site area. WGS84 is the World Geodetic System 1984 and the reference co-ordinate system used for marine licence applications. Co-ordinates taken from GPS equipment should be set to WGS84. Coordinates taken from recent admiralty charts will be on a WGS84 compatible datum. Ordnance survey maps do not use WGS84.

Example: For positions read from charts the format should be as in the example: 55°55.555'N 002°22.222'W (WGS84). The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the format should be as in the example: 55°55'44"N 2°22'11"W (WGS84).

It is important that the correct positions, in the correct format, are included with this application, as any errors will result in the application being refused or delayed.

To supplement your application, please provide a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which must be marked to indicate:

- the full extent of the works in relation to the surrounding area;
- latitude and longitude co-ordinates defining the location of the works;
- the level of MHWS;
- any adjacent SAC, SPA, SSSI, MPA, Ramsar or similar conservation area boundary.

Drawings and plans will be consulted upon. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

- (e) Provide details of the proposed disposal site for the dredged substance(s) or object(s) and, if necessary, any alternative disposal site(s) considered. In determining whether to grant a marine licence, MS-LOT will take into account any site nominated by the applicant. However, should this site be unsuitable, the nearest suitable disposal site for the dredged substance(s) or object(s) will be identified. Should you wish to establish a new site, please provide details in a covering letter with your application and MS-LOT will contact you to discuss your proposal before your application is determined. The cost of any site investigations to identify any new disposal site will normally be the responsibility of the applicant.
- (f) Indicate if any part of the works (dredging or sea disposal site) are located within the jurisdiction of a statutory harbour authority and provide details of the statutory harbour authority where relevant.
- (g) Provide a full method statement. The method statement must include details such as the rate of dredging, timing of the operation and order of the areas to be dredged.
- (h) Provide assessment of the potential impacts the works may have, including interference with other uses of the sea. Please include details of areas of concern e.g designated conservation areas, such as a SAC, SPA, SSSI, MPA or Ramsar site and shellfish harvesting areas. Further guidance on designated conservation areas can be obtained from SNH at this website: <http://gateway.snh.gov.uk/sitelink/index.jsp> and guidance on shellfish harvesting areas can be obtained from <http://www.foodstandards.gov.scot/> with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage".

Any application for beach replenishment works must be cross checked as to whether the proposed site is a designated bathing water site. If so, all physical works should ideally be done outwith the Bathing Water Season (1st June to 15th September). Further guidance on the Bathing Waters Directive (2006/7/EC) can be obtained from <http://apps.sepa.org.uk/bathingwaters/>.

Where there are potential impacts from the works, please provide details of proposed mitigation, such as use of MMOs or PAM, in response to potential impacts.

7. Details of Substance(s) or Object(s) to be Dredged

Information is required for each dredge site area listed in section 6 (d). please provide the following information:

Name of Dredge Area: For example Approach Channel or West of South Quay.

Type (Maintenance or Capital): **Maintenance dredge** applies to an area that has been dredged more than once and either annually or on a regular basis and was last dredged with the past 7 years; and a **Capital dredge** applies where an area/depth is being dredged either for the first time, or which has not been dredged within the past 7 years.

For capital dredging operations, a pre-dredge survey and sediment chemical analysis report will be required by MS-LOT prior to the issue of a sea disposal licence. Please contact MS-LOT for details in relation to specific projects. For maintenance dredging operations sites that have not been chemically analysed for more than 3 years, pre-dredge chemical analysis will be required to be undertaken. In addition to those samples analysed by the applicant, sediment sub-sample(s) must be submitted to MS-LOT as check monitoring may be required.

Estimated Specific Gravity: Indicate the specific gravity of the substance(s) or object(s) to be dredged from each dredge area.

Depth: Indicate the maximum depth (in metres) below the current seabed level, to which it is expected dredging is to be carried out, for each dredge area.

Quantity to be Dredged per Year (wet tonnes): Indicate the quantity of substance(s) or object(s) to be dredged (per year) from each dredge area. The quantity must be provided in wet tonnes.

8. Physical Composition

Indicate the approximate proportions as a percentage for each size range against each of the dredge site areas listed in section 6 (d) which are expected to be removed.

9. Details of Substance(s) or Object(s) Quality

Please indicate whether the substance(s) or object(s) from any of the areas to be dredged have been chemically analysed within the past 3 years. If yes, please provide details (locations, dates, results) on a separate sheet. If no, please provide justification. For capital projects, you are required to have representative sediment samples analysed at a laboratory of choice (see MS-LOT Pre-dredge Sampling Guidance document at <http://www.gov.scot/Topics/marine/Licensing/marine/Applications/predredge> for analytical requirements. This is liable to extend the time required to consider your application **as marine licence applications will not be determined without provision of this chemistry data.**

As part of the application determination process, you are required to carry out an assessment of the chemical and physical characteristics of the substance(s) or object(s) to be deposited at sea and potential effects upon the marine environment. It is your responsibility to show that the substance(s) or object(s) are suitable to be considered for sea disposal. This assessment should form part of your BPEO.

Under section 27(2) of the Marine (Scotland) Act 2010, the licensing authority has an obligation to consider the availability of practical alternatives when considering applications involving disposal of substance(s) or object(s) at sea. All applications for sea disposal must be supported by a detailed assessment of the alternative options - BPEO assessment. This must include a statement setting out the reasons why deposit of the substance(s) or object(s) at sea is the preferred option and applications will not be considered unless they are accompanied by such an assessment. All options in the BPEO must be explored fully (as per the guidance documents) otherwise your form and BPEO are liable to be returned to you, thereby delaying processing of the application.

As part of the licence conditions, you are likely to be required to take representative samples of the dredged substance(s) or object(s) during the dredging/sea disposal operations for analysis by MS-LOT. In such cases, samples must be taken at specified locations and depths and placed in containers which will be provided. The

samples must then be returned to MS-LOT at the Marine Laboratory Aberdeen. This process enables MS-LOT to fulfil its obligations under international conventions.

10. Details of Vessel(s) Undertaking Dredging and Sea Disposal

Provide the vessel name, vessel type (e.g cutter-suction) and name and address of all vessel operators to be used for dredging and sea disposal operations. If vessel details are not available at the time of application, please indicate this on the form as these details will be required prior to licence issue.

11. Noise Monitoring

Under the Marine Strategy Regulations (2010), there is now a requirement to monitor loud, low to mid frequency (10Hz to 10kHz) impulsive noise. Activities where this type of noise is produced include seismic airguns, other geophysical surveys (<10kHz), pile driving, explosives and certain acoustic deterrent devices. Where noisy activity is being undertaken, you must complete an initial registration form for the noise registry which allows you to provide details on the proposed work. Completion of a 'close-out' form, which allows licensees to provide details of the actual dates and locations where the activities occurred, is also required within 12 weeks of the completion of the 'noisy' activity or, in the case of prolonged activities such as piling for harbour construction or wind farms, at quarterly intervals or after each phase of foundation installation.

These forms can be downloaded from:

<http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

Marine licence applications will not be accepted until this form has been completed and submitted.

12. Statutory Consenting Powers

Please describe in the answer to this question what (if any) statutory responsibilities you (or your client) have to consent any aspect of the project.

13. Scotland's National Marine Plan

Scotland's National Marine Plan has been prepared in accordance with the EU Directive 2014/89/EU, which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process. Any applicant for a marine licence should consider their proposals with reference to Scotland's National Marine Plan. A copy of Scotland's National Marine Plan can be found at: <http://www.gov.scot/Publications/2015/03/6517/0>

Indicate whether you have considered the project with reference to Scotland's National Marine Plan and provide details of considerations made including reference to the policies that have been considered. If you have not considered the project with reference to Scotland's National Marine Plan please provide an explanation.

14. Consultation

Provide details of all bodies consulted and give details of any consents issued including date of issue.

15. Associated Works

Indicate whether the application is associated with any other marine projects (e.g. land reclamation, or marine/harbour construction works etc). If this is the case, provide reference/licence number for the related marine projects.

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It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Section 54 of the Marine (Scotland) Act 2010, all information contained within and provided in support of this application will be placed on a Public Register. There are no national security grounds for application information not going on the Register under the 2010 Act.

Public Register

Do you consider that any of the information contained within or provided in support of this application should not be disclosed:

- (a) for reasons of national security; YES NO
- (b) for reasons of confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES NO

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Target duration for determination is 14 weeks. Please note that missing or erroneous information in your application and complications resulting from consultation may result in the application being refused or delayed.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

Signature [Redacted]

Date

Name in BLOCK LETTERS

Application Check List

Please check that you provide all relevant information in support of your application, including but not limited to the following:

- Completed and signed application form
- Maps/Charts
- Co-ordinates of the boundary points of the area of harbour jurisdiction (if you are a statutory harbour authority)
- Method Statement
- BPEO Assessment
- Analytical chemistry data (for capital projects)
- Transportation plan (dredger route to and from disposal site – if required)
- Additional information e.g. photographs, consultation correspondence
- Noise Registry – Initial Registration Form (if applicable)
- Payment (if paying by cheque)

1. Applicant Details

Title: **Mr** Initials: **L** Surname: **Coutts**

Trading Title (if appropriate):

Address: Shetland Islands Council, Town Hall, Lerwick, Shetland ZE1 0HB

Name of contact (if different):

Telephone No. (inc. dialing code): **01595 744 929**

Email: **lee.coutts@shetland.gov.uk**

Statutory Harbour Authority? YES NO

If **YES**, please provide a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the area of harbour jurisdiction using Appendix 01 Additional Co-ordinates form if necessary.

2. Dredging Contractor Details (if any)

Title: Initials: Surname:

If the Dredging Contractor is the Applicant shown in section 1 please tick the box

Trading Title (if appropriate):

Address:

Name of contact (if different):

Telephone No. (inc. dialing code):

Email:

3. Agent Details (if any)

Title: **Mrs** Initials: **J E** Surname: **Burns**

Trading Title (if appropriate):

Address: **Capital Square, 3rd Floor, 58 Morrison Street, Edinburgh, United Kingdom
EH3 8BP**

Name of contact (if different):

Telephone No. (inc. dialing code): **[Redacted]**

Email: **janet.burns@stantec.com**

4. Payment

Enclosed Cheque

Invoice

Contact and address to send invoice to:

Applicant

Agent

Other

If **OTHER**, please provide contact details:

Title:

Initials:

Surname:

Address:

Email:

5. Application Type

Is this application for a new dredging site or a site that has previously been dredged:

New Site Previously Dredged Site

If an **PREVIOUSLY DREDGED SITE**, please provide the following:

Consent/Licence Number	Expiry Date	Quantity (wet tonnes) dredged under consent/licence as at (date)

6. Dredging and Sea Disposal Details

(a) Brief description of the dredging and sea disposal operation:

SIC are planning to redevelop the Grutness to Fair Isle ferry route, which will include a new vessel and upgrading the landside infrastructure at both harbours. On 30 June 2023 Marine Scotland Licensing Operations Team (MS-LOT), acting on behalf of the Scottish Ministers, granted a marine licence (MS-00010318) to SIC for the pier extensions and rock armour protection required for the upgrade of Grutness Pier Navigational dredging to -4.5mCD will be required to provide a sufficient water depth for the new vessel around the proposed pier extension and linkspan. A backhoe dredger or cutter suction dredger will likely be used to dredge the sediment within the dredge pockets. Where rock is present within the dredge pocket, rock breaking and ripping below water will be achieved using a large barge-mounted excavator. Dredging is anticipated to take place between March 2024 and September 2025. For the purpose of this licence application, it is proposed to deposit the dredged material at the 'Scalloway' (FI095) site. This site is the nearest disposal site to the dredging operations.

(b) Proposed start date (Target duration for determination of a marine licence application is 14 weeks):

March 2024

(c) Proposed completion date:

September 2026

(d) Location of Dredging:

Grutness, Shetland

Latitude and Longitude co-ordinates (WGS84) defining the extent of all dredge areas (continue on Appendix 01 Additional Co-ordinates form if necessary):

Dredge Area A

Latitude										Longitude										
5	9	°	5	2	.	4	7	3	'N	0	0	1	°	1	6	.	7	7	5	'W
5	9	°	5	2	.	4	7	3	'N	0	0	1	°	1	6	.	8	5	6	'W
5	9	°	5	2	.	4	7	0	'N	0	0	1	°	1	6	.	8	7	5	'W
5	9	°	5	2	.	4	6	2	'N	0	0	1	°	1	6	.	8	8	0	'W
5	9	°	5	2	.	4	4	7	'N	0	0	1	°	1	6	.	8	7	6	'W
5	9	°	5	2	.	4	2	9	'N	0	0	1	°	1	6	.	8	2	7	'W

Dredge Area B

Latitude									Longitude									
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W

Dredge Area C

Latitude									Longitude									
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W

Dredge Area D

Latitude									Longitude									
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W

Dredge Area E

Latitude									Longitude									
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W
		°			.			' N				°			.			' W

(e) Name of Disposal Site and Oslo Code:

Scalloway (FI095) - disposal site is circular - the coordinates for the centre point are provided below. The radius is 100 m.

Latitude and Longitude co-ordinates (WGS84) defining the extent of disposal site (continue on Appendix 01 Additional Co-ordinates form if necessary):

Latitude									Longitude											
6	0	°	0	6	.	9	0	0	' N	0	0	1	°	2	1	.	1	0	0	' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W
		°			.				' N				°			.				' W

(f) Is any part of the works (dredging or sea disposal site) located within the jurisdiction of a statutory harbour authority?

YES NO

If YES, please specify statutory harbour authority:

(g) Method statement including rate of dredging, timing of the operation and order of the areas to be dredged (continue on separate sheet if necessary):

The maximum dredge volume is estimated to be 16,500 m³ (including a 15% contingency on dredge volume) or <47,000 wet tonnes. Typically a layer of 1 m thick sediment deposit is overlying the rockhead; it is estimated that approximately 50% of the dredge volume will comprise soft sediments and 50% will comprise rock.

A backhoe dredger (BHD) or cutter suction dredger (CSD) will likely be used to dredge the sediment within the dredge pockets. Where rock is present within the dredge pockets, rock breaking and ripping below water will be achieved using a large barge-mounted excavator. The rock material will likely be loaded onto a barge which will then dispose of the material at a licenced disposal site.

BHDs use an articulating excavator bucket to remove material from the seabed. The material is raised to the surface through movement of the crane and bucket. Typically, material is then loaded into an on-board hopper or separate hopper barge for transport by vessel, or in some instances, pumping via pipeline. BHDs are limited by the reach of the crane and are more suited to smaller dredges such as the one at Grutness. However, due to the force that they can exert, they are able to handle stronger sediments.

CSDs have a cutting head that physically rotates to dislodge material from the bed. The loosened material is then sucked through the cutter head via a centrifugal pump and transported to the dredge vessel. The material is typically discharged hydraulically via a pipeline or into a separate vessel for transport. CSDs can handle a wide range of materials, including harder and more consolidated material such as stiff clays and rock. During operation, the dredger is stationary, and often moored with spud legs to help with positioning and manoeuvring.

Navigational dredging is anticipated to take place in a single season between March 2024 and September 2025. Dredge rates will depend on the equipment the dredging contractor chooses to use and are not known at present. It is anticipated that rock dredging will be much slower compared to soft sediment dredging.

Once loaded, the BHD and/or CSD dredger will sail to the disposal ground where the material will be deposited using a bottom discharge method. To prevent the formation of significant high spots, the dredger will continue sailing at reduced speed whilst dumping. During both types of dredging activity, a bed leveller may be used to move material into an accessible area for dredging, and/or to smooth the bed after dredge extraction. Dredging operations will be supported by regular bathymetric surveys to target the dredging in the correct locations and at the correct depth.

During dredging, overflow of sediments will be limited as far as possible, consistent with efficient operation of the vessel. This will minimise the sediment disturbance, thus reducing the potential for increased turbidity and siltation of the local seabed. At the disposal site, the impact to the seabed morphology will be mitigated by ensuring that the dredged material is deposited over the full area of the disposal ground.

Regular inspection of door seals and checks for leakage is undertaken by the dredge contractor with the aim of avoiding sediment loss during the transport phase from the dredge to disposal location. In higher sea states, loading of the hopper will be reduced to minimise spillage over the vessel overflow weir, caused by the motion of the vessel. All contractors will operate according to good practice guidelines and take all precautions to avoid fuel and oil spills during dredging operation. This will minimise the risk of spills and therefore, the overall potential impact on water quality.

Good practice and muting devices will be used on all equipment whenever possible to minimise noise.

(h) Potential impacts the works may have (including details of areas of concern e.g designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

Potential impacts of the works have been assessed in detail within the Environmental Report submitted in support of the construction works (including dredging) marine licence application for the Grutness Harbour Improvement Works (Ref no. 00010318). On 30 June 2023 Marine Scotland – Licensing Operations Team (MS-LOT), acting on behalf of the Scottish Ministers, granted a marine licence (MS-00010318) to SIC for the pier extensions and rock armour protection required for the upgrade of Grutness Harbour. The assessment of the dredging operations at Grutness and disposal at the Scalloway disposal site presented in the Environmental Report concluded the following:

Suspended sediment concentrations (SSC) and sediment deposition: Based on the small dredge volume of the proposed dredge and the coarse nature of the dredge material the impacts associated with the dredging activity are considered to be highly temporary in nature and highly localised in extent, only extending around 20 to 50 m from the pier and berth pocket themselves. Once the dredging is completed, local SSC conditions will revert quickly to their existing (baseline) values. Consequently, across the wider Grutness embayment, including offshore areas, the western coastline and the coarse sand beach to the south, any changes to SSC and sediment deposition as a result of the proposed dredging activities are considered likely to be negligible.

The impacts associated with the dredge disposal activity are considered to be limited in extent to the region around the disposal site itself and short-term in nature (continuing for only as long as the disposal activity is underway). Taking account of the scale of the disposal volume, the nature of the dredge material and the local conditions at the Scalloway disposal site, the spatial and temporal magnitude of change in SSC is considered negligible.

Changes to local hydrodynamics at the dredge site and the disposal site. Any changes to hydrodynamics, waves and associated combined sediment transport arising from the development including the newly dredged berth pocket are expected to be small in magnitude and highly localised in extent, only covering the area around the pier and berth pocket themselves. Overall, predicted changes to local hydrodynamics at the disposal site as a result of changes to local water depth are expected to be very small in magnitude and highly localised in extent and are considered to be negligible.

Water and Sediment Quality: The disturbance of sediments during dredging and disposal can remobilise contaminants, which are absorbed to the finer sediment particles and create oxygen depleting substances. However, the overall low level of contamination, low organic content and the localised nature of the redeposition or disposal are considered to have a negligible impact on water quality which will be of a temporary nature during the period of the dredge and disposal. Sediment contamination sampling showed a single sample containing concentrations of mercury above Action Level 2 (only detected in the surface sample, no contamination was detected within the depth integrated sample); this is considered to be a very localised hot spot of contamination as mercury concentrations are well below Action Level 1 in all other samples. The very localised sediment containing high concentration of mercury (see sampling results) will be kept separate from the remainder of the dredge material and be disposed of as contaminated waste, resulting in overall low contamination sediments which will be suitable for disposal. Reduced water quality from accidental spills during the dredging operations or from the dredger in transit is also unlikely to be insignificant with normal good practice employed for the dredging operations.

Marine Ecology: The dredge, by its nature, will permanently remove the benthic communities colonising the subtidal sediments within the area to be dredged. Grutness harbour does not overlap with any internationally or nationally designated sites that have benthic habitats as qualifying features. Recolonisation of the exposed material is expected to occur over a relatively short period of time based on an understanding of the benthic community present in the area and the life history strategies of the species. The overall impact is considered to be negligible. Some smothering of benthic communities will occur immediately adjacent to the area to be dredged; however, this is likely to be a temporary and localised impact for the period of the dredge. Recovery of disturbed communities in this substrate is likely to take place within a comparatively short period of time. The impact of siltation on benthic communities is therefore considered to be negligible. The impact at the disposal site is also considered negligible because of the localised extent of smothering and the benthic communities present being tolerant to sediment deposition and capable of rapid recovery.

Fish and Shellfish: Overall, fish are not considered to be sensitive to the negligible changes in water quality predicted, and the proposed dredging and disposal will, therefore, not result in significant displacement of fish. There are no PMF shellfish species, shellfish protected areas or classified shellfish harvesting areas within 1 km kilometres from the dredge area or from Scalloway disposal site. Scallop are present approximately 1.5 km from Scalloway disposal site. The plumes generated during dredging and disposal are predicted to be localised to the dredge and disposal sites and do not overlap with any commercial shellfish beds or the distribution of sensitive shellfish species. The overall effect of changes in water quality on fish and shellfish species during both dredging and disposal is, therefore, considered negligible.

Marine Mammals: The Environmental Report concluded that the effect of any change in habitat and water and sediment quality on fish and shellfish and subsequently on prey availability for marine mammals, overall, is considered to be negligible for both the dredging operations and disposal. Additionally, the underwater noise assessment concluded that there is not considered to be any risk of injury or significant disturbance to marine mammals from the proposed dredging activities at Grutness. Furthermore, the proposed dredging activity will be temporary and take place over a period of 7 months. Lastly, the change in collision risk for marine mammals as a result of increased vessel movements during construction and disposal activities is considered to be negligible.

7. Details of Substance(s) or Object(s) to be Dredged (Please provide details for each of the Dredge Areas listed in Section 5 (d) above. Continue on a separate sheet if necessary):

Dredge Area	Name of Dredge Area	Type (Maintenance or Capital)	Harbour bed, Seabed or Estuary bed?	Estimated Specific Gravity	Depth (metres)	Quantity to be Dredged per Year (wet tonnes)
A	Grutness Harbour	Capital	Harbour	2.7	-0.5mCD to -4.5mCD	16,500 m ³ , <47,000 wet tonnes
B						
C						
D						
E						

8. **Physical Composition of Substance(s) or Object(s) to be Dredged** (Please provide the approximate proportions as a percentage for each size range against each of the dredge site areas listed in Section 6 (d) above. Continue on a separate sheet if necessary):

Dredge Area	Clay and Silt (< 0.063 mm)	Sand ($0.063 \leq \text{Sand} < 2.0$ mm)	Pebbles, Cobbles & Boulders (≤ 2.0 mm)
A	20	24	56
B			
C			
D			
E			

9. **Details of Substance(s) or Object(s) Quality**

Have the dredged substance(s) or object(s) been chemically analysed in the last 3 years?

YES NO

10. **Details of Vessel(s) Undertaking Dredging and Sea Disposal** (please note that a marine licence cannot be issued until the vessel details have been confirmed. Continue on a separate sheet if necessary):

Vessel Name	Type of Vessel	Name and Address of Operator
TBC	TBC	TBC

11. Noise Monitoring

Will loud, low to mid frequency (10Hz to 10kHz) impulsive noise be produced by the project? YES NO

If **YES**, which please indicate the noise generating activities and sound frequencies:

Noise Generating Activity	Sound Frequency (Hertz)
Use of Explosives	
Other (please describe below):	

If you have ticked **YES**, please complete the Noise Registry – Initial Registration form located at: <http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

A marine licence application will not be accepted until this form has been completed and submitted.

12. Statutory Consenting Powers

Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project?

No

13. Scotland's National Marine Plan

Have you considered the application with reference to Scotland's National Marine Plan? YES NO

If **YES**, provide details of considerations made including reference to the policies that have been considered:

The proposed works at Grutness which includes the upgrade of the pier facilities (including dredging) to accommodate a new link span structure is an essential development to maintain and improve the vital ferry link between Grutness and Fair Isle. The development, for which this dredging is essential, is crucial for sustaining the long-term future of the Fair Isle community as well as providing additional social and economic benefits for residents and visitors.

Scotland's vision for the marine environment is "clean, healthy, safe, productive and diverse seas; managed to meet the long term needs of nature and people". Chapter 13 Shipping, Ports, Harbours and Ferries outlines several objectives and policies. Notably Objective 3 is "safeguarded essential maritime transport links to islands and remote mainland communities". Objective 2 is "Sustainable growth and development of ports and harbours as a competitive sector, maximising their potential to facilitate cargo movement, passenger movement and support other sectors."

The development (including dredging) complies with the relevant policies of Scotland's National Marine Plan.

If **NO**, please provide an explanation of why you haven't considered the National Marine Plan?

14. Consultation

List all bodies you have consulted and provide copies of correspondence:

As detailed in the Marine Scotland Guidance on Marine Licensable Activities subject to Pre-Application Consultation, this marine activity (dredging) is not subject to the requirement for pre-application consultation.

15. Associated Works

Provide details of other related marine projects, including reference/licence numbers (if applicable):

MS-00009624 - Sediment sampling at Grutness (works undertaken during Spring 2023)

ML application for the Pier Extension and Rock Armour Protection at Grutness (Ref. no. 00010318, Licence ID MS-00010318)

European Protected Species Licence - Impact Piling - Grutness Pier (Ref. no. 00010500, Licence ID EPS/BS-00010500)