

## Document Information

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<b>Project Number</b>	232029
<b>Project Name</b>	Lerwick & Dales Voe Dredging
<b>Document Title</b>	Proposed MD-LOT Lerwick Dredging Licence Amendment
<b>Document Reference</b>	232029-LK-MD-LOT-LA
<b>Document Date</b>	02/07/2025
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## Document Controls and Verification

Date	Version	Notes	Prepared by:	Verified by:	Verified signature:
02/07/2025	P01	Issue	APS	PRN	
10/07/2025	P02				
21/07/2025	P03				
29/07/2025	P04				

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## Background

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The capital dredge proposals were developed over 18 months ago with an MD-LOT application made in July 2024 for a dredging campaign involving trailer suction dredger (TSD), back-hoe dredger (BHD) and stating that there may also be a requirement for pre-treatment of hard rock strata. Since then, new and revised harbour operations have been introduced, including larger vessels accessing existing facilities. As such, minor revisions are needed to the licensed capital dredge areas – i.e. widening the navigation channel in the Greenhead area and extending the Holmsgarth dredge area to the east and north, as shown on the attached plan. In addition, two areas no longer need to be dredged in the Holmsgarth area – see Appendix A plan attached. These amendments will increase the total in-situ dredge volume from 301,150m<sup>3</sup> (602,000 WT) to 358,639m<sup>3</sup>.

A Phase 1 dredging campaign in June / July 2025 to remove all soft dredge material using a trailer suction hopper dredger from existing MD-LOT licenced dredge areas is nearing substantial completion.

The remaining capital dredge Phase 2 campaign is currently being re-programmed while an additional MD-LOT licence application, HRA, EPS, BS, and BPEO report is updated to include requirement for pre-treatment of some hard rock strata using blasting and then final removal by BHD to the licenced offshore disposal site. A similar dredge campaign using this technique was successfully completed in 2008 and full dredging method statement is now provided.

Finally, during discussion with current dredge contractor on potential for over dredge due to his proposed methods then an additional over dredge and final slope profiles contingency allowance of 170,904m<sup>3</sup> has been calculated in addition to above which may vary once dredging progressed and may or may not be required.

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### Appendix A – Layout Drawings

## **1.0 Introduction**

MD-LOT licence MS-00011195 for Lerwick North Harbour is currently in place – Dredge quantity on licence states 602,000 WT with similar disposal.

A Phase 1 contract in June / July 2025 to remove all soft dredge material using trailer suction dredger (TSD) from MD-LOT licenced areas is nearing substantial completion with approx. 144,968m<sup>3</sup> net (163,951m<sup>3</sup> gross) removed.

Since the original dredging campaign was planned and after current engagement with clients preferred dredging contractor then there is a desire to undertake minor amendments to the Lerwick Harbour dredging works to improve further the navigational safety of the harbour.

- 1.0 Minor dredging additions at Holmsgarth, Scattland and Greenhead channel with some omissions.
- 2.0 Pre-treatment of hard rock strata using blasting over a duration of 7.5 weeks.
- 3.0 Larger dump vessels proposed to reduce return trips to designated dredge disposal site from 24No / day previously assessed down to 5No per day.
- 4.0 Contingency over dredge volume allowance based on contractor's methods that may not all be required.
- 5.0 While the dredging duration remains unchanged, dredging may be undertaken partly in winter.

## 2.0 Information Available

Updated drawing 232029-MD-20 & 21 attached confirm additions and omissions to dredging proposed.

The Best Practical Environmental Report (BPEO) included with original application confirmed volumes in m<sup>3</sup> and below table shows these together with additional volumes from the proposed revised dredging together with a further contingency allowance for any over dredge due to specific dredging techniques:

### Summary of Dredge Volumes and Depths – Lerwick Harbour

Dredge Area	Dredge Volume (m <sup>3</sup> )	Target Dredge Depth (m below Chart Datum)
Holmsgarth -7m CD	11,450	-7.0
Holmsgarth -10m CD	225,050	-10.0
Holmsgarth -10.5m CD		-10.5
Mair's Pier South	200	-8.0
Heogan Tuning Circle	34,100	-9.0
North Ness Channel	30,350	-10.0
<b>Lerwick Harbour Total Volume (Original)</b>	<b>301,150</b>	
<b>Additional Material from drawing 232029-MD-20 (June 2025)</b>		
Holmsgarth Additional (Area A)	39,100	-10
Holmsgarth Berth 5 (Area E)	733	-9
Scattland Channel (Area G)	6,426	-9
Greenhead Channel (Area H)	11,230	-9
Over Dredge (est. 300mm ave.)	170,904	
<b>Lerwick Harbour Total Volume (Revised)</b>	<b>529,543</b>	

### **3.0 Revised HRA & BPEO Findings**

The revised Habitats Regulation Assessment findings based on the new works scoped including pre-treatment blasting of hard rock strata concludes no anticipated adverse effects for birds or seals if stated mitigation methods is implemented.

The revised BPEO confirms no change to the original report conclusions.

### **4.0 European Protected Species**

An EPS / MMA application is now included with this current licence amendment covering pre-treatment of hard strata with blasting.







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