



# STORNOWAY PORT AUTHORITY



## PORT MASTERPLAN

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## Consultants

This masterplan has been prepared for Stornoway Port Authority by Fisher Associates, in association with Wallace Stone and EnviroCentre.



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# 1. INTRODUCTION



## Overview of Stornoway Port

Stornoway Port is the primary port for the Outer Hebrides. It is one of the busiest ports on the west coast, north of the Clyde, and is identified in the National Planning Framework as one of the six “key ports” in Scotland.

The Port is central to the economy of the Island, facilitating the lifeline ferry service and supporting almost all economic activities from fishing and aquaculture, to construction, retail and marine leisure.

The Port is operated by Stornoway Port Authority (SPA), a Trust Port with the twin objectives of working for the benefit of port users and the wider community.

SPA follow the Modern Trust Ports for Scotland Guidance for Good Governance, and have established a Board with a balance of specialist skills and experience.

## Key developments in the last five years

Expansion of the marina

Redevelopment of the ferry terminal

Increase in visiting cruise vessels

## Photos of the Port



## Masterplan approach

The masterplan sets out the framework for the physical development of Stornoway Port for the next 20 years.

The masterplan will provide a basis for SPA to develop strategies that allow the Port to meet challenges to existing markets as well as develop new markets, and safeguard the crucial role that the Port has in supporting the economy of Stornoway and the Island. Through supporting such economic growth and diversification, the local economy will become stronger and more robust in the face of any downturn in a particular sector.

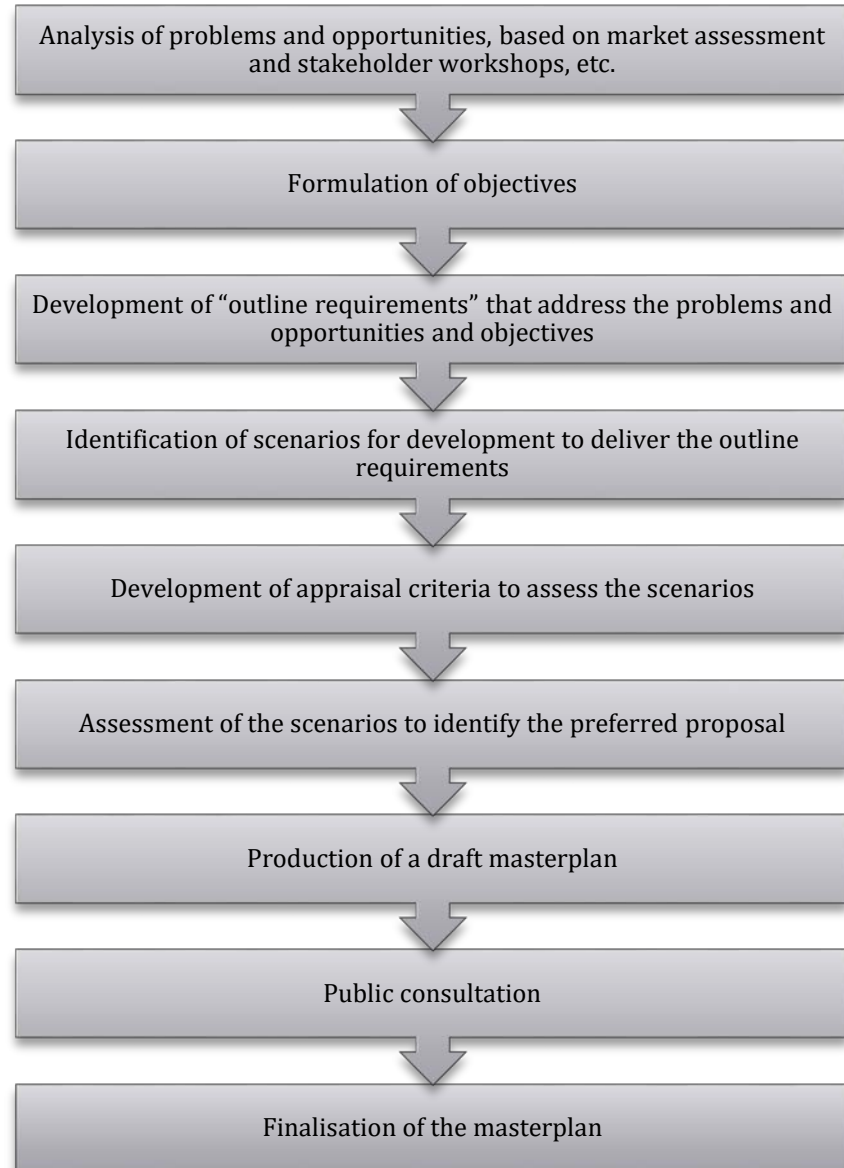
The principles followed in developing the masterplan include:

- *Avoid building today what you need to move tomorrow*
- *Minimising environmental impact*
- *Optimising use of resources*
- *Grouping similar activities together*
- *Phased developments where applicable*
- *Providing sufficient landside access*

The broad approach to developing this masterplan followed the STAG (Scottish Transport Appraisal Guidance) methodology, which has stakeholder consultation and participation as a central component. The first step is to identify the key problems and opportunities faced by the Port, and these are then developed into outline requirements. Scenarios for meeting these requirements are then identified and assessed, to identify the optimal scenario. At each stage stakeholder consultation is sought (see opposite).

The structure of this masterplan is detailed overleaf.

## Approach



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- 1.1 Overview of Stornoway Port
- 1.2 Masterplan
- 1.3 Objectives

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- D. Socio-Economic Impact



## Vision and mission

The vision for Stornoway Port is:

***“To be the leading Port in the north west of Scotland”***

Our mission is:

***“To provide a safe and efficient port, whilst continuing to grow and develop”***

This vision and mission are underpinned by the specific objectives developed for the masterplan (see right).

The masterplan sets out a long term physical strategy for SPA to deliver on their vision, mission and objectives, taking into account current constraints and threats, as well as opportunities for the Port.

The projects that form the masterplan will bring long overdue investment to the Port and ensure that it continues to be the economic backbone of Stornoway and the Outer Hebrides.

## Masterplan objectives

A financially sustainable business with a competitive business environment and a diverse revenue base

Contribute to the socio-economic prosperity of Stornoway and the Outer Hebrides

Provide a safe environment for all harbour users

Support strong environmental stewardship





## 2. CONTEXT FOR STORNOWAY PORT

## Ferries

**The ferry service between Stornoway and Ullapool is an absolute lifeline.**

A large proportion of all visitors to the Outer Hebrides travel through Stornoway Harbour, and the vast majority of people arriving into Stornoway use the ferry service.

The lifeline service, operated by Calmac Ferries, is provided by the Loch Seaforth, which started operations in 2015. The Loch Seaforth has capacity for 700 passengers and 143 cars or 20 commercial vehicles, and operates three daily return trips (two on Sunday), with one being a dedicated overnight freight service.

To support the new ferry, infrastructure at the terminal was improved in 2014, and the terminal now has a larger car and truck marshalling area, dedicated trailer drop area, and an elevated covered passenger access facility.

The number of passengers using the ferry has been stable in recent years at around 230,000 single trips per year, while the number of cars has increased from around 68,000 in 2011 to just under 74,000 in 2015. The volume of commercial traffic has fluctuated with the economy, and around 12,000 commercial vehicles used the ferry in 2015.

While the new ferry provides a good service for Stornoway, there are risks in being dependent on a single vessel and Linkspan. In addition, traffic on the ferry is highly seasonal due in part to the growing tourist sector. Services for weekend crossings during the summer months are at full capacity weeks in advance and there is a growing need for an additional ferry service.

There are some issues with traffic flows and parking at the ferry terminal, and solutions are currently under discussion.

## Stornoway ferry terminal and the Loch Seaforth



## Aquaculture

**Stornoway is the hub for the aquaculture sector in the Outer Hebrides.**

Most of the fish farms are located on the east coast of Harris and Lewis, but an increasing number are being developed on the west coast. Overall production is growing, and the Outer Hebrides now account for one fifth of Scottish fish farming production.

The leading operator at the Port is The Scottish Salmon Company. Their fish are landed at the killing station at Arnish, then trucked to their Marybank facility for processing and shipping, via the ferry to the mainland.

## Fisheries

**Stornoway Port supports a strong, sustainable fishing industry.**

Annual catch landed in the Outer Hebrides is around 3,500 tonne with a value of some £10 million. The sector is focussed mainly around creel fishing, with landings of nephrops (langoustine) accounting for 60% of landings by value, and the other key products being lobster, crabs and scallops.

Most of the Langoustine landed in Stornoway goes to the shellfish processing facility on Goat Island, and is then trucked via the ferry to the mainland.

Facilities for fishing boats have a central place in the Inner Harbour along Esplanade Quay and North Beach Quay, where the fish market and ice plant are located.

## Well boat and fishing vessels





## Marine tourism and leisure

**There is already a strong marine tourism sector in Stornoway that provides a solid foundation for future growth.**

Stornoway is a key gateway for the £53 million per year tourism sector in the Outer Hebrides\*. The town and surrounding area have a lot to offer for the visiting mariner and tourist alike. This includes the newly renovated Lews Castle and grounds, Harris Tweed, Callanish Standing Stones, golf, distillery, Blackhouses, beaches, sailing, etc.

The Port has a popular marina that was expanded in 2014 and can now take 80 yachts. The berths in the marina filled up soon after they were installed, and there is now a shortage of space during the Summer. There is limited capacity for visiting yachts, and to maintain its share of the growing yachting sector, more berths are needed together with other facilities (e.g. dry storage for yachts and a dedicated yacht lift).

Stornoway is an established port of call on the cruise circuit, attracting 66 scheduled calls in 2016. Stornoway attracts relatively few large cruise vessels as those over 156 metres in length cannot berth alongside, and passengers are brought ashore by tender. This is increasingly unpopular with cruise ships as a means of getting their passengers ashore and is impractical in bad weather.

Growth in the cruise market around Scotland is strong, especially for large vessels. To maintain and grow the cruise market in Stornoway, a facility for berthing cruise ships of 300 metres or more is needed.



\* *Outer Hebrides Visitor Survey 2012-13*



## Boatyard

**Stornoway has an established boatyard that supports the local fishing, commercial and leisure industries.**

The yard is used for construction, modification, repair, maintenance and painting work. The yard handles fish farming boats, inshore and offshore fishing vessels, workboats, small ferries and leisure vessels.

There is potential for expanding the work at the yard. However, there is a requirement to upgrade the cradle and slipway, and a large shed for boat painting and maintenance. Without a large covered working area, the yard will continue to see some local vessels go to other facilities for maintenance work and painting.

The yard is the only significant facility in the Outer Hebrides, and one of the largest yards on the west coast of Scotland.

## Engineering at Arnish

Stornoway has an established engineering and fabrication yard at Arnish, which is operated by BiFab. The yard is modest by industry standards with a 100 metre quay, 60,000 m<sup>2</sup> of open storage and assembly halls covering 17,400 m<sup>2</sup>.

Work has been erratic in recent years, but in mid-2016 BiFab was awarded the contract for assembling the jackets for the Beatrice Wind Farm.

There is potential for the yard to gain work in a number of sectors that have growth potential in the Outer Hebrides, including onshore wind farms, offshore renewables, and oil and gas. However, to fully capitalise on its potential, a deep water berth and more quayside space are required, as well as improved road access.

## Goat Island boatyard and Arnish



## Land ownership within the harbour area

Stornoway Port Authority is responsible for most of the shorefront in Stornoway. From Bayhead, SPA owns Cromwell Quay, North Beach Quay, Esplanade Quay, Pier 1 and Pier 2 and the area along South Beach up to and including the bus station.

The land for the ferry terminal (Pier 3) is leased to the Port Authority from the Crown Estate and the Stornoway Trust.

SPA also owns the land around Newton Basin, including Goat Island.

At Arnish, SPA is responsible for the operation of the Pier.

The Port's property interests include much of Stornoway's car parking which, together with the bus station site, is leased to Comhairle Nan Eilean Siar.

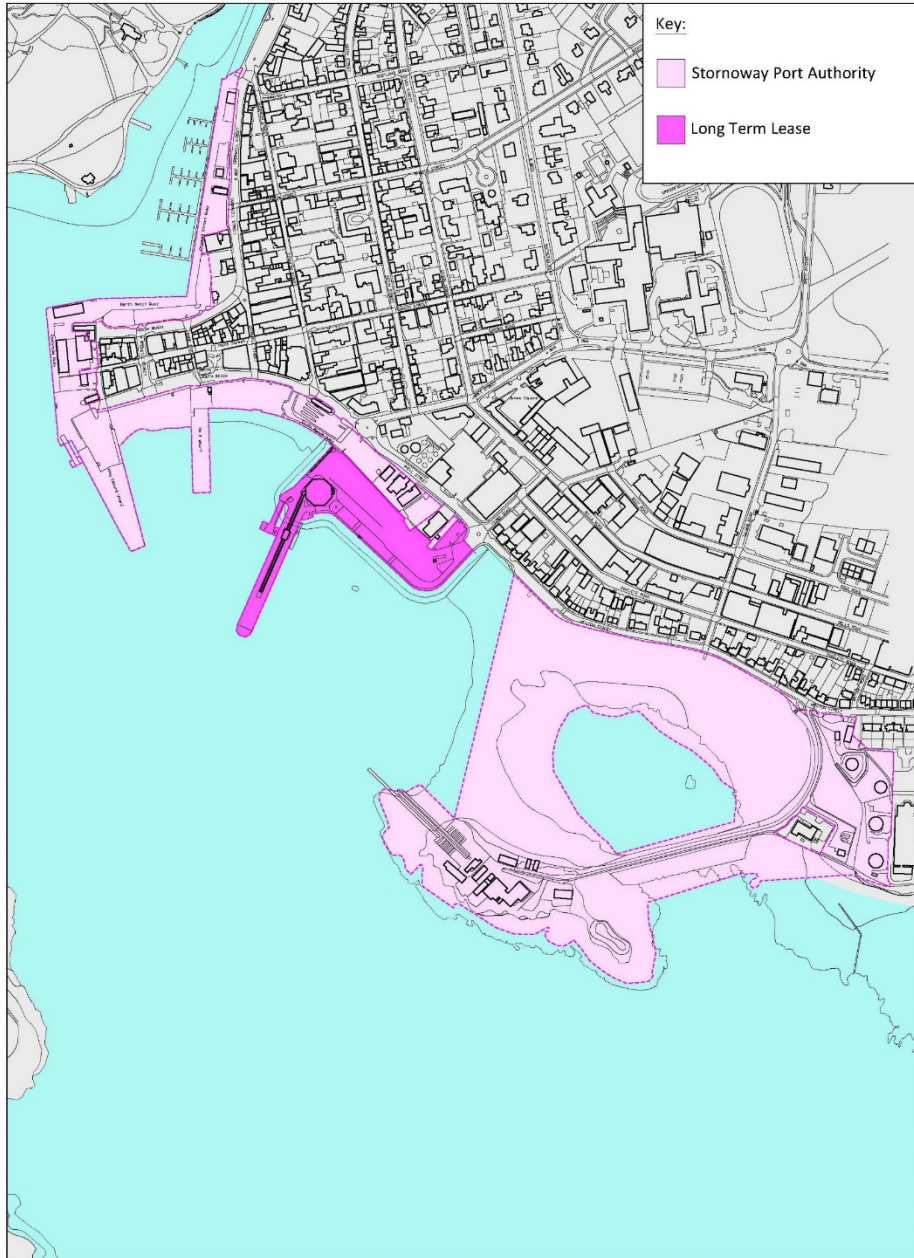
The map overleaf (Figure 1), outlines SPA's land and facilities.

## Key assets

Marina	• Capacity for 80 yachts
Cromwell Street Quay	• Length 259m, Depth 2.1m
North Beach Quay	• Length 175m, Depth 3.5m to 2.4m
Esplanade Quay	• Length 122m, Depth 5.2m to 4.5m
West No.1 Pier (Ro/Ro)	• Length 128m, Depth 7.6m to 4.5m
East No.1 Pier	• Length 130m, Depth 7.0m to 1.0m
East No.2 Pier (Tanker)	• Length 70m, Depth 4.5m to 1.0m
West No.2 Pier	• Length 80m, Depth 4.5m to 1.0m
West No.3 Pier (Ro/Ro)	• Length 140m, Depth 6.0m
East No.3 Pier	• Length 140m, Depth 6.1m
Arnish Pier	• Length 100m, Depth 6.1m







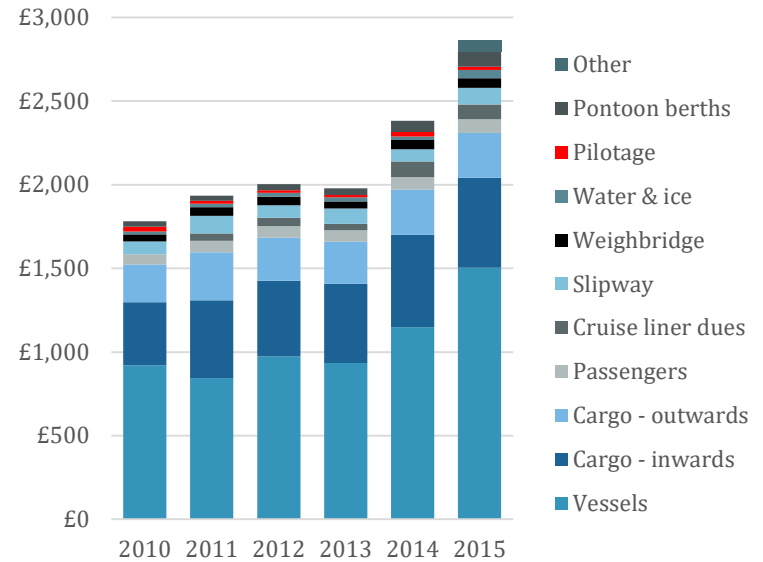
**Business review**

SPA's revenues have been rising in recent years, up from just under £1.8 million in 2010 to over £2.8 million in 2015 (see Figure 2).

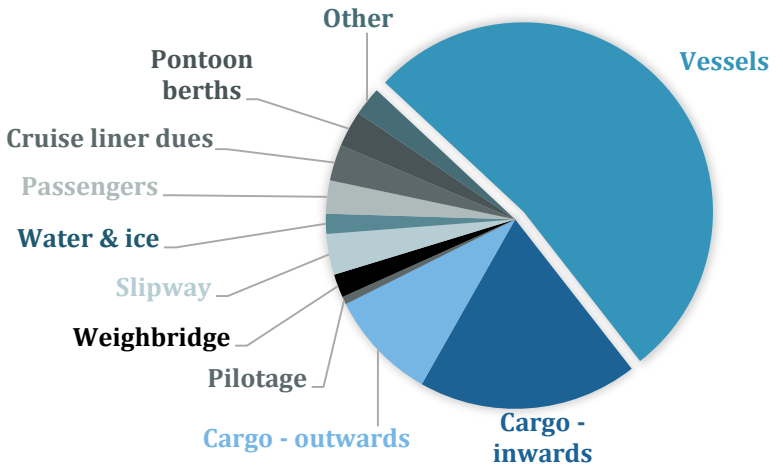
The rise in income has been particularly rapid since 2013, and has been driven largely by increased vessel dues (berthing and anchoring), resulting from a doubling of cruise calls and an increase in the number of fish farm work boats using the port.

Vessel dues account for around half of SPA's income (see Figure 3), with a further 28% from dues on cargo. Given the nature of the Island's economy, income from dues levied on inwards cargos are around twice the income from outward bound cargos.

**Figure 2: Stornoway Port Authority income summary (£ 000)**



**Figure 3: Stornoway Port Authority income by source - 2015**



**Baseline**

Stornoway is the only large town in the Outer Hebrides, with around 8,000 people living in the greater Stornoway area, some 30% of the total population of the Outer Hebrides.

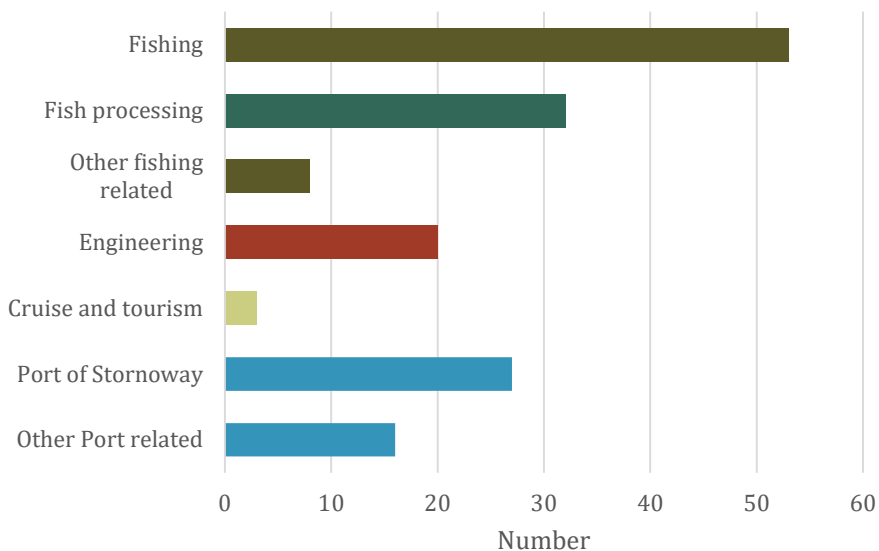
The population has been declining slightly in numbers in recent years, and also ageing. In the absence of any economic stimulus, these trends are expected to continue.

The public sector is the leading area of employment, with public administration, health, education and social services accounting for 35% of total employment in 2011 (see Figure 4).

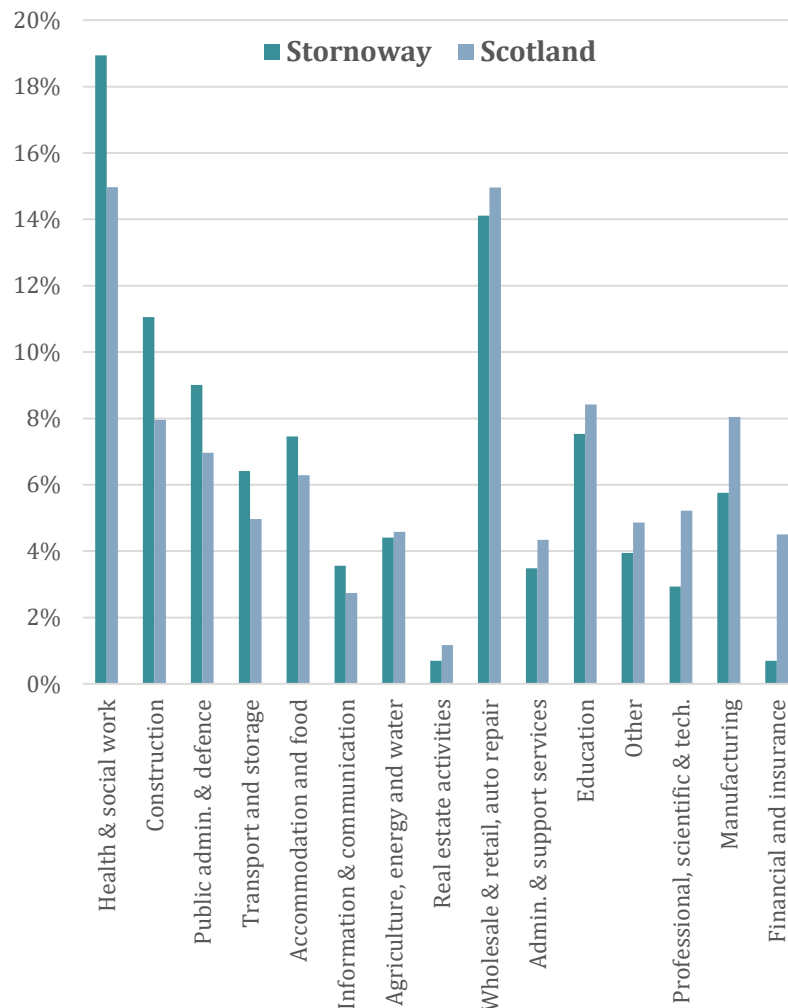
The other key areas of employment are construction (11% of total employed), retail (14%), transport (6%), and accommodation and food which covers much of the tourist sector (7%).

Total employment at the Port is estimated at 159 direct full-time equivalent jobs (FTEs), and a breakdown by activity is provided in Figure 5 below.

**Figure 5: Direct Port employment (estimated FTEs 2016)**



**Figure 4: Employment by sector (2011 Census)**



## Social context

Stornoway Port and the harbour are vital social and economic assets both for Stornoway and the Outer Hebrides as a whole.

The Port is inextricably linked to the Town and wider community, and the importance of its role is significant. Indeed, the sheltered harbour is the reason for Stornoway's existence as it was named by the visiting Vikings as "Steering Bay", which later morphed into Stornoway.

Geographically the Port is centred within the Town, and much social (and economic) activity in Stornoway is connected in some way with the Port.

The working harbour is an integral part of what makes Stornoway and the Outer Hebrides a leading tourist destination in the UK, attracting more than 218,000 visitors in 2012-13, equivalent to over 8 visitors per resident.

While commercial priorities are a key focus of the masterplan, Stornoway Port Authority is fully committed to supporting the overall development of Stornoway and the Outer Hebrides.

## Economic context

Although direct employment at the Port is relatively modest (159 full-time equivalent jobs), this does not include the substantial number of jobs dependent on the people and cargos that come through the Port. Indeed, over 95% of all visitors to the Lewis travel through Stornoway Harbour.

It is clear that the Port and Port-related businesses are of huge importance for Stornoway and the wider community, providing a base for:

- The lifeline ferry service to Ullapool.
- Fishing, fish farming and seafood processing operations.
- The key boatyard in the Outer Hebrides.
- Cruise tourism industry.
- Marine leisure activities, including the marina.
- Offshore renewables engineering industry at Arnish.

The developments set out in the masterplan will have a transformative impact on the town. The masterplan should help secure existing jobs as well as create new employment opportunities in Stornoway and across the Outer Hebrides.



## Overview

A port is a long-term investment and both its infrastructure and operations should be sustainable, in terms of the local economy and the environment, including river fishery, archaeology, flooding and marine.

A masterplan provides an opportunity to ensure that the principles of sustainability are central to long-term development.

For environmental sustainability, the key baseline conditions are summarised right. The masterplan will need to be developed and implemented with these in mind.

## Key environment baseline conditions

- Lewis Peatlands Special Protection Area (SPA), Lewis Peatlands Special Area of Conservation (SAC), and Lewis Peatlands RAMSAR Site are c. 5.5km from the Harbour: *no pathways for potential significant effects.*
- The Shiant Isles SPA is c. 35km from the Harbour: *no pathways for potential significant effects.*
- The Harbour is within close proximity to the North-east Lewis proposed Marine Protected Area (pMPA) which is located at Arnish (c. 1.6km at its closest point to the Harbour): *potential interaction with Risso's dolphin.*
- Shiant East Bank pMPA is located c. 20 km from Stornoway Harbour: *no pathways for potential significant effects.*
- Wester Ross Marine Protected Area comprises a diverse range of seabed habitats c. 45km from Stornoway Harbour: *no pathways for potential significant effects.*
- The nearest protected area, at approximately 2km distant, is the Tong Saltings Site of Special Scientific Interest (SSSI): *no pathways for potential significant effects.*
- The Harbour is not designated for its landscape character or visual appeal. The closest National Scenic Area (NSA) is the South Lewis, Harris and North Uist NSA, which is approximately 26km south west of Stornoway: *not likely to impact the NSA.*
- Lews Castle and Lady Lever Park, a prime example of mid-late 19th century ornamental and estate landscape, with distinctive coastal and riverside drives and woodlands. Furthermore, Lady Lever Park is identified as an Historic Garden and Designed Landscape: *potential interaction.*
- SEPA have identified that a large area of the Harbour is situated within the 1 in 200-year coastal flood extent, so has a medium to high risk of flooding: *will require flood risk assessment and possible mitigation.*
- There are a number of Archaeology and Cultural Heritage sites within the vicinity of Stornoway Harbour: *potential interaction.*
- *River fisheries:* The local Glen and Creed Rivers offer fishing for up to 500 local and visiting anglers. *There is potential for impacts on this important habitat.*
- Contaminated Land: *There are previously identified small areas of contamination within the Harbour land holdings.*

## Importance of policy context

Stornoway Port operates within a framework of policies at the national, regional and local level. The key policies of importance to the Port and masterplan are listed on the right (and detailed in Appendix A).

To be effective the masterplan must take account of these policies, and every effort has been made to ensure that this masterplan is consistent with these policies, and where possible supports them.

To achieve this, the policy framework has been incorporated into the assessment criteria used in evaluating development options.

In response to the emerging Port Masterplan Plan the Comhairle has incorporated a specific new Local Development Plan Policy recognising the Masterplan and development proposals within it, and seeking alignment with other LDP Policies.

## Key policy context

Scotland's Economic Strategy

Scotland's National Marine Plan

National Policy Statement for Ports, 2012

HIE Marine Tourism Strategy: Awakening the Giant

HIE Operating Plan 2016 – 2019: Building Our Future

Outer Hebrides Local Development Plan (2012)

Outer Hebrides LDP under development (2017-18)

Outer Hebrides Single Outcome Agreements: 2013-2017

HITRANS Regional Transport Strategy (2008-2022)

National Planning Framework 3

Scottish Planning Policy





## 3. MARKET ASSESSMENT

## Methodology

To identify future requirements of the Port, a thorough assessment of the market for existing activities at Stornoway, as well as potential opportunities, was undertaken. This market assessment covered each of the 15 sectors/activities listed below in terms of:

- Current situation
- Market outlook
- Market drivers
- Market opportunities

The main findings of the market assessment are summarised in this section, and priorities for the masterplan are identified.

## Sectors

Ferry

Aquaculture

Fisheries

Cruise

Marine leisure

Wave energy

Offshore wind

Onshore wind

Engineering -  
fabricationEngineering -  
boatyard

Decommissioning

Oil and Gas

Tidal energy

Deep sea mining

Other potential  
markets

Key Findings	
Market	Key findings
Ferry	<ul style="list-style-type: none"> <li>• The single ferry to Ullapool is a lifeline service.</li> <li>• Growth is expected once the economy picks up.</li> <li>• Strong growth in tourism has led to capacity constraints during the summer peak.</li> <li>• There is a growing need for a second ferry in the medium term, otherwise capacity limitations will impact on economic growth.</li> </ul>
Aquaculture	<ul style="list-style-type: none"> <li>• The industry is well developed with the Outer Hebrides accounting for around one quarter of total Scottish salmon farming production.</li> <li>• Strong growth is expected in salmon farming with new sites being developed around the Outer Hebrides.</li> <li>• The industry thinks that growth may be constrained by shortages of manpower and affordable housing.</li> <li>• There is potential for additional supporting services to be developed.</li> </ul>
Fisheries	<ul style="list-style-type: none"> <li>• The sector is largely focused around fishing for langoustine, lobster and crab.</li> <li>• There is some limited potential for increasing landings at Stornoway, but this would require investment in the fleet.</li> <li>• There is great opportunity to raise local value added through additional processing and packaging in Stornoway. The planned refurbishment of Goat Island should support this.</li> <li>• The impact of the UK leaving the EU is unclear, but it could be beneficial with the potential for local control over stocks.</li> </ul>
Cruise	<ul style="list-style-type: none"> <li>• Lewis has a strong and competitive offer for cruise operators, and has potential to capture significant market share.</li> <li>• Strong growth can be achieved but the Port needs to be able to provide a berth for large vessels (up to 330 metres LOA and possibly longer).</li> </ul>
Marine leisure	<ul style="list-style-type: none"> <li>• There is a shortage of yacht berths during the season, and potential for attracting more visitors.</li> <li>• It is estimated that an additional 100 berths could be filled in the short to medium term, and possibly more with marketing and improvements in facilities.</li> </ul>



## Key Findings (continued)

Market	Key findings
Engineering – boatyard	<ul style="list-style-type: none"> <li>• There is potential to increase the amount of work undertaken in Stornoway at the Port’s only boatyard (on Goat Island). This would require refurbishment of the facility (including large shed and upgrading of the cradle and slipway), and plans for this are being developed.</li> <li>• There is also scope for a yacht maintenance facility in Stornoway with yacht lift.</li> </ul>
Engineering - fabrication	<ul style="list-style-type: none"> <li>• There is an established fabrication yard at Arnish, operated by BiFab.</li> <li>• There is significant potential for Stornoway to expand as an engineering base, supporting the offshore renewables sectors (wave, wind and tidal energy) as well as the oil and gas sector.</li> <li>• However, there are a number of constraints in and around the existing facility (lay down area, quay length and depth alongside) that need to be addressed in order to maximise the potential.</li> </ul>
Onshore wind	<ul style="list-style-type: none"> <li>• There are several large-scale onshore wind farm projects that would use Arnish as a marshalling and storage base.</li> <li>• These projects are well advanced, but depend on Government support if they are to proceed (CfDs and funding for a new interconnector).</li> </ul>
Offshore wind	<ul style="list-style-type: none"> <li>• Stornoway is well placed to provide a marshalling and support base for offshore wind farm installations around the Outer Hebrides.</li> <li>• There is also good potential for a maintenance base for offshore wind farms around the Outer Hebrides and north Irish Sea.</li> <li>• However, developments in this area require further technology improvements and continued Government support for renewables.</li> </ul>
Wave energy	<ul style="list-style-type: none"> <li>• If/when commercial-scale wave energy is developed in the UK, the Atlantic coast of the Outer Hebrides is the prime location for sites, and Stornoway is the ideally placed to be the support base.</li> <li>• However, as with offshore wind, developments in this area require further technology improvements and continued Government support for renewables.</li> </ul>



## Key Findings (continued)

Market	Key findings
Decommissioning	<ul style="list-style-type: none"> <li>• Scotland and the UK are short of decommissioning capacity and there is potential for Stornoway to attract decommissioning work.</li> <li>• With its previous background in constructing large offshore structures at the Arnish site, there is capacity for decommissioning work of a similar scale.</li> </ul>
Oil and Gas	<ul style="list-style-type: none"> <li>• It is thought that there is considerable potential for substantial oil and gas finds west of the Outer Hebrides.</li> <li>• Following the 29<sup>th</sup> Licensing Round, significant exploratory work is expected in this area.</li> <li>• Stornoway is ideally placed to provide a support base for exploration, and possibly later development and production activities, in this zone.</li> </ul>
Tidal energy	<ul style="list-style-type: none"> <li>• Support bases for the installation and maintenance of tidal stream energy farms tend to be located near to the site. The potential for Stornoway is then dependent on the installation of tidal stream farms around the Outer Hebrides.</li> <li>• The energy resources around the Outer Hebrides are good, but development would depend on Government support, including additional interconnector capacity.</li> </ul>
Deep sea mining	<ul style="list-style-type: none"> <li>• If/when this industry develops in the Atlantic, there is some potential for Stornoway to provide a base of operations for mobilisation/demobilisation, crew change, supplies, etc., and possibly aggregation of mineral production.</li> <li>• However, there will be significant competition with Atlantic coast ports in Ireland, Portugal and possibly France.</li> </ul>
Fuel supplies	<ul style="list-style-type: none"> <li>• There is evidence of unsatisfied demand for supply of fuel for vessels.</li> </ul>
Other	<ul style="list-style-type: none"> <li>• There is good potential for manufacturing facilities to be established in Stornoway supplying the local fish farming industry.</li> </ul>



## Priorities for masterplan

Short (0 – 5 years)	Medium (5 – 10 years)	Long (10+ years)
<ul style="list-style-type: none"> <li>• <b>Ferry:</b> additional service (freight) required to meet demand growth. Second linkspan for security of lifeline service.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Oil &amp; Gas:</b> promote Stornoway as an exploration support base and invest in facilities (e.g. mud silos).</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Oil &amp; Gas:</b> develop support base for exploration and production activities.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Fisheries:</b> improve existing facilities for processing to expand and raise local value added.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Wave energy:</b> promote Stornoway as base for test installations.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Wave energy:</b> develop O&amp;M (Operating &amp; Maintenance) base for large-scale wave energy farms.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Cruise:</b> build a deep water cruise berth to capture additional calls from large vessels.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Aquaculture:</b> promote development of the supply chain.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Offshore wind:</b> develop marshalling and O&amp;M base for large-scale farms.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Marine leisure:</b> build additional marina capacity with supporting services, including yacht lift and dry storage, to meet outstanding demand.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Marine leisure:</b> expand marina capacity and ancillary services to continue to grow market.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Deep sea mining:</b> promote Stornoway as a base for Atlantic mining.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Boatyard:</b> refurbish Goat Island facilities to grow market.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Tidal energy:</b> promote Stornoway as a support base for demonstration projects.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Tidal energy:</b> develop a support base for large-scale tidal projects.</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Onshore wind:</b> develop deep water quay and laydown area to support wind farm projects.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Offshore wind:</b> promote Stornoway as a support base for projects.</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Aquaculture:</b> provide additional fabrication/manufacturing facilities.</li> </ul>		
<ul style="list-style-type: none"> <li>• <b>Decommissioning:</b> market and develop piece medium decommissioning capacity</li> </ul>		





## 4. STAKEHOLDER ENGAGEMENT

## Introduction

**Stornoway Port is operated for the benefit of stakeholders, and it is these stakeholders who best understand what the issues and constraints are, and what is needed.**

Consultation is essential in developing an effective masterplan that addresses the needs of stakeholders and the wider community.

At each stage, port users and representatives of the wider community have participated in the development of the masterplan, ensuring that it meets their requirements.

The Stornoway Trust will be key to the success of the masterplan, and they have given their initial support to the developments identified in the Masterplan.

## Participative workshops and discussions with key stakeholders

Discussions were held with key stakeholders, and a representative range of port users were invited to attend workshops. These workshops and discussions covered:

- Issues and constraints relating to Stornoway Port.
- Potential ideas for the development of the Port.
- Identification of opportunities for the Port.

In addition, market soundings were taken with representatives of businesses in the marine energy and other industrial markets, as well as the cruise industry.

Representatives from national government, Highlands and Islands Enterprise (HIE) and Comhairle nan Eilean Siar (CnES) were also consulted.

## Public consultation events

Public consultation formed an essential step in finalising the masterplan, and this was undertaken through:

- A press release highlighting the main issue and providing information on consultation events. This was picked up by six local and regional new organisations.
- Publication of the draft plan on the SPA website, with information on the consultation events and a request for written comments.
- Drop-in sessions held at the Stornoway Ferry Terminal, (with 24 visitors), where the plans were on display and consultants and SPA executives were on hand to discuss any issues.
- An open public meeting in An Lanntair (with 22 attendees), with a full presentation and open discussion of the plans.

## Outcomes

The workshops and discussions with stakeholders helped identify the key issues and constraints at the Port, and these are highlighted on the next page.

Overall the feedback during the consultation process was positive, and the SPA received strong support from Comhairle Nan Eilean Siar for the Masterplan,

Following the community consultation, several changes have been made to the masterplan, and these are included in this document. The key change has been the removal of Sandwick as a planned location for a new marina.



## Key issues and constraint arising from the consultation

## Ferry

- Traffic congestion in and around the ferry terminal.
- Limited capacity on the ferry during peak periods.
- No resilience with ferry service: only one vessel and one linkspan.
- Current service is a potential constraint on growth.

## Cruise and marine

- A deep water berth for cruise vessels is needed to capture growing market.
- Shortage of yacht berths and limited amenities are constraining potential growth in marine leisure.
- Need to improve public access to water.

## Cargo

- Limited operational area for bulk cargos.
- Need for a deep water berth.

## Fisheries

- Improved access to fishing vessels needed with better facilities for crews.
- Goat Island in need of rehabilitation to support expansion in seafood processing.

## Industry

- Boatyard in need of rehabilitation to support growth.
- Arnish facilities are insufficient to meet demands from onshore wind and offshore energy sectors.
- Deep water quay and extensive laydown area needed to support growth.
- There is potential to attract decommissioning work

## Oil and gas storage

- The location of the oil and gas terminal and storage is restricting development in the town.
- Storage and delivery limitations will constrain future economic growth.

## Town

- The Town is generally lacking socio-economic vibrancy.
- The Port's visual impact and connectivity with the Town needs to be improved for the benefit of both visitors and locals.



## Outline requirements

By combining the outcome of the consultation with the objectives, a number of outline requirements for the Masterplan were identified (see right).

A range of infrastructure projects for the Port that meet these requirements were then identified. These options were then assessed, with the preferred options forming the basis of the Masterplan (as detailed in section 5).

A: Provide infrastructure to safeguard / grow RoRo ferry services

B: Relocate oil and gas terminals and storage

C: Improve bulk cargo handling / efficiency

D: Develop Stornoway as a cruise destination

E: Support development of fishing industry and local value added

F: Support growth in marine tourism / sailing market

G: Improve / expand boat repair services

H: Support development of offshore energy sector and marine engineering

I: Improve efficiency of port estate and SPA harbour operations

J: Improve the Port's visual impact and connectivity with the Town for visitors and locals



## 5. MASTERPLAN

## Introduction

The preferred option for the masterplan for Stornoway Port is summarised in this section.

The selection of the preferred option is the result of a STAG-type appraisal, which included the development of alternative options that aim to meet the outline requirements. These options were then assessed against STAG and other criteria, and this process and the results are summarised in Appendix B.

An overview of the preferred option is provided in Figure 6 overleaf, and more details are provided in Appendix C.

A high level review of the environmental and socio-economic impacts of the preferred option are given at the end of this section.

## i) Minor town improvements

This covers a number of small changes that should have a significant impact on the Port:

- Reconfiguring of the ferry terminal layout to reduce congestion with additional pontoons for cruise tenders.
- Improved and separate services (showers, toilets, laundry) at Cromwell St Quay marina for fishermen and marina users.
- Additional pontoons (10-12 berths) at the north end of the marina.
- Landscaping between Bayhead and the ferry passenger terminal.
- Review of security and access around Port operations.
- Pontoons along North Beach Quay for fishing boats, with electricity supply, and improvements to the fish landing area.

## ii) Bayhead

The development at Bayhead would provide a new pedestrian crossing between the Town and Castle grounds.

The project would comprise:

- A tidal sill, incorporating a fish pass, with a bridge/walkway, that would create a lagoon suitable for small vessels (kayaks, canoes, training dinghies).
- A pontoon for small vessels linked to Cromwell St Quay
- Improvements to the Glen River habitat.

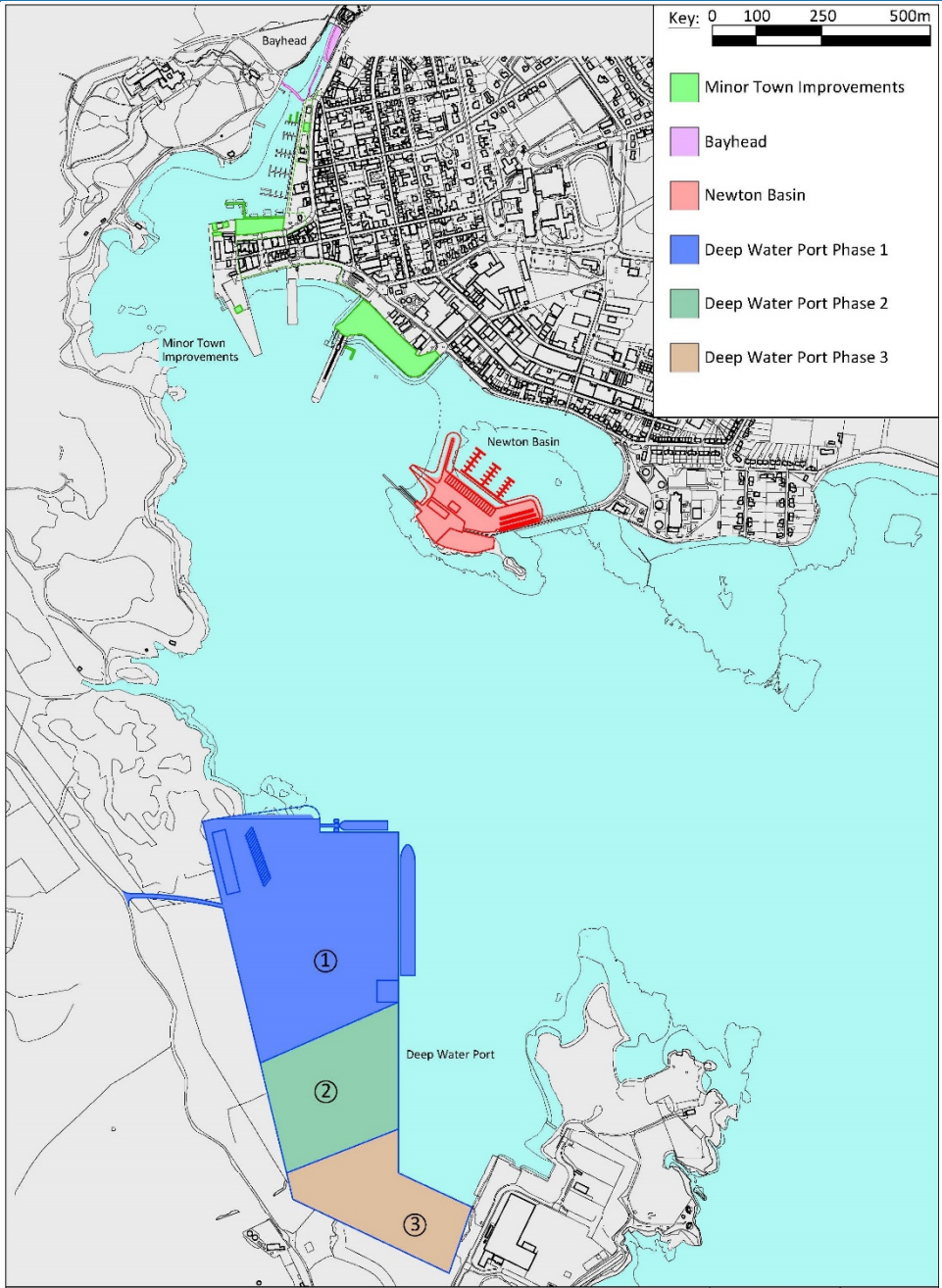
In developing the detailed plans, full cognisance will be taken of the Stornoway Conservation Area and listed status of the Castle grounds sea walls, and flood risk and upstream impacts will be assessed.

## iii) Newton Basin

Development of a new marina and supporting facilities at Newton Basin, together with redevelopment of Goat Island. The development includes:

- Breakwater and marina with around 72 berths.
- Slipway and yacht lift, with associated yacht repair facilities
- Boat storage (on land).
- Marina services.
- Parking.
- Redevelopment of the boatyard site on Goat Island, enhancing ship repair/painting facility.
- Improvement of fish processing facilities.
- Storage and Facilities for Leisure Users (Sail training, specialist vessels, Diving Clubs, Kayakers, etc.)







#### iv) Deep Water Port

The most ambitious part of the masterplan is the creation of a new Deep Water port across the harbour to the south of the river Creed. The new development would include:

- 800 metres of quay (over 400 metres at 10m below CD).
- 29 hectares of laydown area for onshore wind, offshore energy sector and bulk cargo.
- RoRo terminal with space for warehousing.
- Cruise berth for vessels up to 330 metres in length.
- Bus marshalling area for cruise passengers and access into the Castle grounds (via new footbridge).
- Twin track road (straightened) to the main road (A859) and direct road access to existing Arnish development. This would also provide a strong link between the Deep Water port and the Creed Enterprise Park.
- Shore-to-ship power connections will be provided along the quay to make use of local renewable energy supplies.
- Space will be planned for LNG storage for supplying vessels, as well as other fuel storage facilities able to make use of renewable energy supplies in and around the Outer Hebrides.

In addition, the new Port would support relocation of the oil terminal and storage tanks from the Town.

#### Overall masterplan

SPA is aware that the Port is crucial to the economic future of Stornoway and the Outer Hebrides. The Masterplan represents an opportunity to deliver socioeconomic transformation for the Town and beyond.

This masterplan is driven by economic opportunities, and will support job creation in many sectors and a sustainable community.

The Masterplan would be developed in phases, with the decision to proceed with the next phase dependent on the success of the previous phase.

The first phase of the masterplan would include:

- The minor Town developments
- Development of Bayhead
- Newton Basin marina (first phase) and Goat Island redevelopment
- Deep Water Port – first phase.

The cost of the first phase of the Masterplan is estimated at £66.2 million. The establishment of the developments in this phase would create an estimated 203 direct FTE jobs in the Island, averaged over a 10-year period. The five-year construction phase would also support around 66 direct full-time equivalent (FTE) construction jobs.

The full benefits to be gained from the projects developed under the masterplan are summarised on the following pages and detailed in Appendix D.

This transformational proposal adopted by Stornoway Port Authority will be implemented in close cooperation with partners.



## Summary of benefits of masterplan

## Support existing jobs

- Improvements for fishing boats, seafood processing and boatyard will help secure jobs in these areas.

## Boost employment

- New employment opportunities will be created through expansion in cruise and marine tourism.

## Improve resilience and capacity of ferry service

- An additional fit for purpose linkspan will be provided, removing the risk of relying on Pier No. 3, benefiting all areas of Island life.

## Reduce congestion

- The additional linkspan will allow freight road traffic to avoid the centre of Town, reducing congestion and pollution.

## Improve community facilities

- A new watersports facility will be developed, improving the community's access to such activities.

## Improve Town amenity

- Developments along the shorefront will improve access around the Town and promote a vibrant and viable centre, with better links to the Castle.

## Enhance public safety

- A new location for oil and gas delivery and storage will be provided, removing constraints on development of the Town.

## Development opportunity

- The minor town improvements provide a catalyst for redevelopment of the Town centre.
- The potential relocation of fuel storage would provide opportunities for redevelopment.



## Overview of impact – employment generation

## Initial construction phase: 2018-2022

- Average of 66 direct full-time equivalent (FTE) jobs per year created during the five-year construction phase.
- Additional construction jobs will be created with each additional phase.

## First phase of operations: 2023-2032

- Average of 203 direct full-time equivalent jobs per year created under base case assumptions.
- Total employment generated, including additional indirect and induced jobs, is estimated to average 357 FTE per year.
- Under the optimistic development case, total employment generation averages over 756 FTE per year.



## Environmental considerations

The environmental impact (and possible mitigation measures) of each element of the Masterplan will become clearer as the projects are developed. This section provides a high level review of the potential impacts and identification of key issues that should be addressed.

## Landscape and visual

The Harbour is not designated for its landscape character or visual appeal. The closest National Scenic Area (NSA) is the South Lewis, Harris and North Uist NSA, which is approximately 26 km south west of Stornoway.

Development of the Deep Water Port could potentially impact on the Landscape of Lews Castle and Lady Lever Park (Inventory Garden and Designed Landscape). This is a prime example of a mid-late 19th century ornamental and estate landscape, rare on Lewis, laid out with coastal and riverside carriage drives and walks. The designed landscape comprises a series of distinctive wooded parklands contrasting dramatically with the prevailing openness of the island landscape.

There is a potential synergy between cruise liners visiting the harbour and Lews Castle and Lady Lever Park. Development would enhance the integration of Stornoway Harbour, Stornoway town and high value land situated to the west of the proposed masterplan area. This may be considered significant and would be subject to a detailed landscape and visual assessment to ensure the emerging developments do not result in major impacts.

## Conservation designations

The harbour sits within the proposed **North East Lewis Marine Protected Area (pMPA)** which aims to conserve four features, including Risso's dolphin, which is the greatest potential for interaction. Sightings of the dolphin closest to the harbour are off cliffs at Swordale, c. 6km from the harbour. The Hebridean Whale and Dolphin Trust has not recorded sightings of Risso's Dolphin within the Harbour.

The **Shiant East Bank pMPA** (c. 35 km from the Harbour) encompasses an area of shelf banks and mounds in the North Minch, and the **Wester Ross MPA** (c. 45 km from the Harbour) is designated to protect a diverse range of seabed habitats around Wester Ross. The distance from the Harbour makes it unlikely that there will be potential for interaction.

The harbour sits within close proximity of the proposed **Inner Hebrides and the Minches Special Area of Conservation (pSAC)** c. 2 km north and c. 9 km east. This pSAC is being considered for SAC status due to the population of harbour porpoise it supports. There is potential for interaction between the designated site and proposed development. Harbour porpoise are sensitive to underwater noise, and blasting, dredging and piling activities would need to be evaluated before works proceed. A Habitats Regulation Appraisal may be needed.

The **Shiant Isles SPA** are important for breeding seabirds, but as the Isles are c. 35 km from Stornoway, no pathways for potential significant effects have been identified.

The **Lewis Peatlands RAMSAR**, Special Area of Conservation and Special Protection Areas (SPA) sites supports nationally important populations of five Annex 1 bird species, but no pathways for potential significant effects were identified.

**Tong Saltings SSSI** contains one of the largest areas of saltmarsh and tidal flats in the Outer Hebrides, but no pathways for potential significant effects identified.



### Water quality

There is currently little information available on the water environment, and this will need to be considered as part of any future environmental assessment, though experience has identified that water quality has been impacted by oil discharges. This will need to be addressed in the masterplan.

The developments, in particular the construction phases, have potential for adverse impacts on the marine water environment. Dredging could affect water quality if not effectively controlled. If underwater rock blasting is required, the impact on marine mammals needs to be evaluated. Surface water needs to be carefully managed, especially where there is a pathway for contaminants.

Moreover, care needs to be taken with the design of the tidal sill at Bayhead to ensure fish and eelers have full access to the burn, by way of an appropriate fish pass, and silting up is avoided.

### Local amenity

Construction works have the potential to impact on businesses, residents, visitors and the surrounding environment. It will be important to ensure impacts on the local economy, such as the ferry terminal and fishing industry, are minimised.

As for other Harbour developments, these impacts can be controlled and minimised through effective planning, utilising for example a Construction Environmental Management Plan (CEMP). This document provides overarching guidance to help ensure environment mitigation and control measures are implemented.

### Flooding and climate change

The emerging developments represent an opportunity to take cognisance of changes in weather patterns and build resilience to climate change. SEPA flood maps have identified that a large area of the Harbour is situated within the 1 in 200 year coastal flood extent, so has a medium to high risk of Flooding (or a 0.5% chance of occurring in any one year).

There is a long history of flooding from high tides, with coastal floods in 1926, 1959, 1967, 1974, 1975, 1984 and 2014. Coastal flooding affects low lying parts of Stornoway, notably around Cromwell St Quay and North Beach.

Any development proposal would be supported by a flood risk assessment, demonstrating how the flood risk can be addressed and the changes that would result in flood risk in surrounding areas.

### Contaminated land

Some contaminated land surveys have been undertaken around the harbour. There are historic contaminated land issues associated with the power station, historic use of land around the harbour, and discharges of hydrocarbons into Willow Glen.

It is possible that the emerging developments could unlock pollutant pathways that are otherwise static. A contaminated land risk assessment would be undertaken to identify potential “hot spots” and target investigations to gather data to determine the level of risk and, where necessary, options for remediation.





## 6. IMPLEMENTATION

Overview

This masterplan sets out vision for Stornoway Port over the next two decades. This should be viewed as a working document that should be reviewed every three to five years and adapted where necessary to take account of changing market conditions and other developments.

This section covers:

- Potential phasing
- Planning context
- Partnerships
- The next steps in implementation
- Resourcing implementation.

Phasing of development

The projects identified as part of the masterplan have some intrinsic phasing. The minor town improvements can be implemented within the next year. It is hoped to commence the **Goat Island** and **Newton Basin** development by the end of 2017. The **Bayhead** development will follow, depending on co-ordination with stakeholders, investigations and consent.

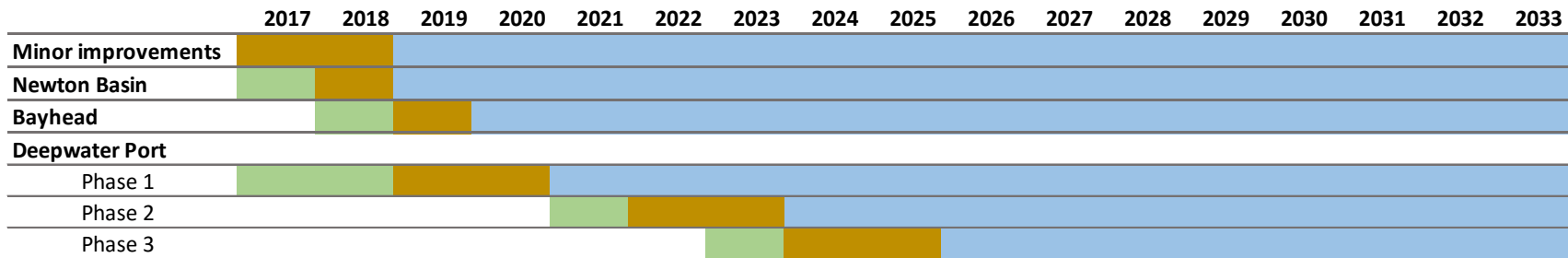
Given the ambition of the project, the pre-construction phase for the **Deep Water Port** is expected to take two years, and the port can then be developed in stages.

An indication of potential time horizons for individual proposals is shown below and in Figure 7 overleaf.

A detailed implementation plan will be developed, setting out the actions and time required to deliver each element of the masterplan. This will be a live document, with regular updates.

A review of the masterplan will be undertaken every five years, with the first review scheduled for 2022.

(Approximate) Phasing of development



KEY    Investigations, design, consents    Construction    Operation



### Bayhead development

- From 2020

### Town improvements

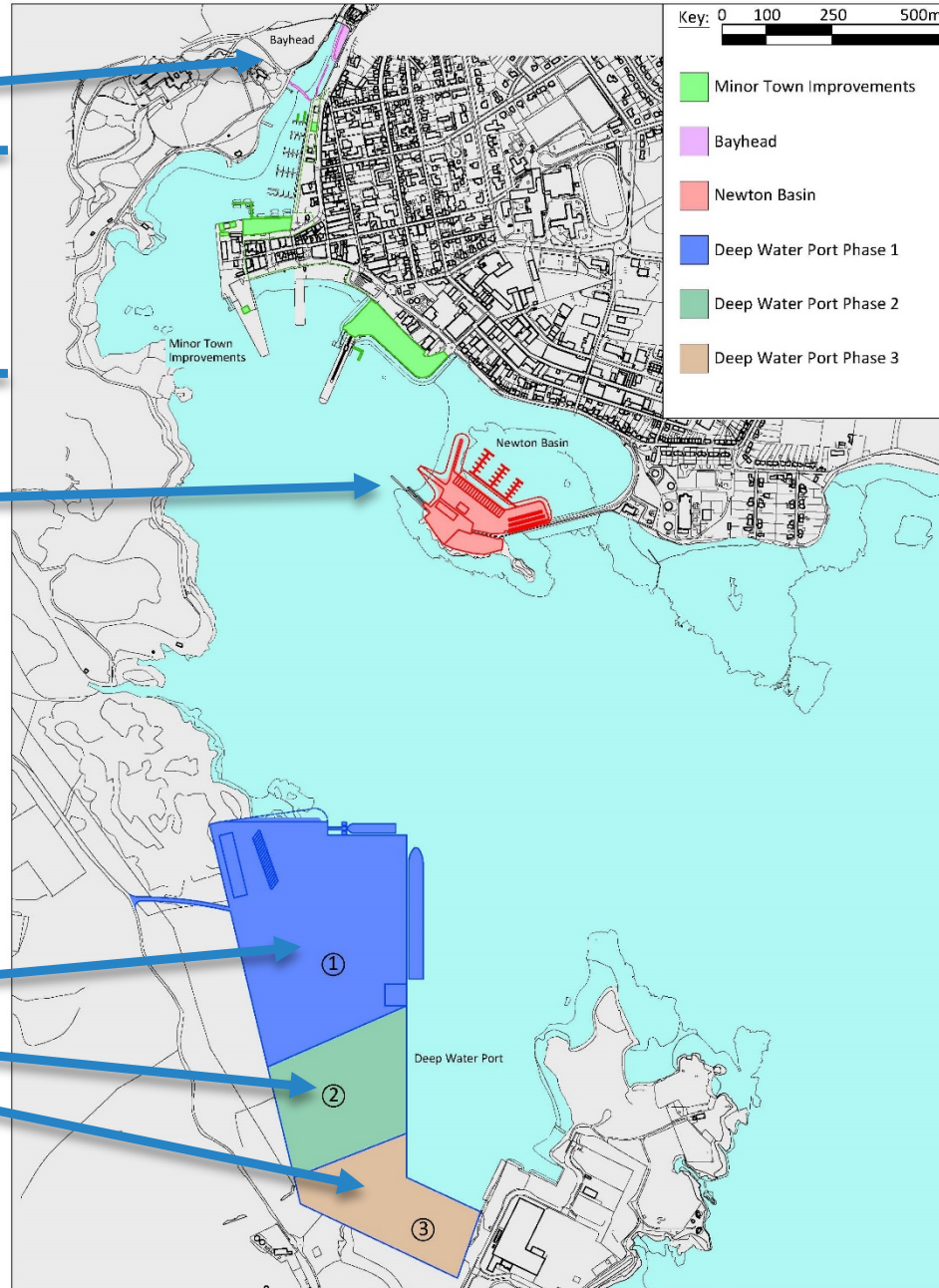
- From 2018

### Newton Basin

- From 2018

### Deep Water Port

- Phase 1 from 2021
- Phase 2 from 2024
- Phase 3 from 2026



## Planning policy framework

The current procedural planning framework was introduced through the Planning (Scotland) Act, 2006. The Act set out the responsibilities for the lead agencies:

- The Scottish Government - directs national planning policy and sets the National Planning Framework.
- Local planning authorities - responsible for processing planning applications and making decisions in their areas.
- Key national agencies - provide formal advice to central government, councils and those applying for planning permission.

The Proposed Plan stage of the new LDP was published in January 2017 and the Port Masterplan is recognised in it through the provision of a specific policy which seeks to acknowledge and safeguard for the emerging Masterplan and its proposals.

As the statutory planning authority, Comhairle nan Eilean Siar is tasked with preparing the statutory Development Plan, and the Council is in the process of preparing a new Outer Hebrides Local Development Plan which is due by 2017-18.

The new LDP will replace the current adopted plan which came into force in 2012.

## Masterplan integration

The masterplan sets out SPA's plans for the physical development of the Port over the next two decades.

SPA will work with the Comhairle nan Eilean Siar to ensure that there is strong coordination between the masterplan and the new Local Development Plan when it is adopted.

SPA will also continue to work closely with HIE and local and national government agencies to ensure that the masterplan remains aligned with planning and policy developments.



## Next steps

SPA will develop the projects under the masterplan in conjunction with key partners and public agencies. Work will focus on the following areas required to further implementation:

1. Detailed business cases, covering costs, revenues, and other benefits.
2. Detailed feasibility studies identifying the optimal technical solutions for the Deep Water Port and other elements of the masterplan.
3. Detailed consultation with stakeholders to ensure the projects meet existing and future needs, and to progress the implementation.

Key partners identified to date are listed right.

The main steps in the project development process are shown on the next page.

## Key partners

### Ferry operator – Calmac ferries

- Ensure that the new RoRo facility meets long-term needs.

### Wind farm developers/SSE

- Ensure that the Deep Water Port meets their requirements, and are delivered on time.

### Offshore energy industries

- Ensure that the Deep Water Port has a long-term future supporting these industries.

### Cruise operators

- Ensure that the new cruise terminal and facilities maximises growth potential.

### Boatyard users

- Ensure that the Newton development supports growth in the sector.

### Fishermen

- Ensure that developments around the Fish Market meet long-term needs.

### Fishing organisations

- Work to avoid any negative impact on sea and river fisheries.

### Stornoway Trust

- Ensure the masterplan projects work with the objectives and plans of the Trust.

### Comhairle nan Eilean Siar

- Maximise synergies between physical and socioeconomic aspects of SPA masterplan and LDP.

### Community and local partners

- Maximise the benefits of the developments for the community and minimise disruption.

### Seafood processors

- Ensure that the projects support growth in the sector.



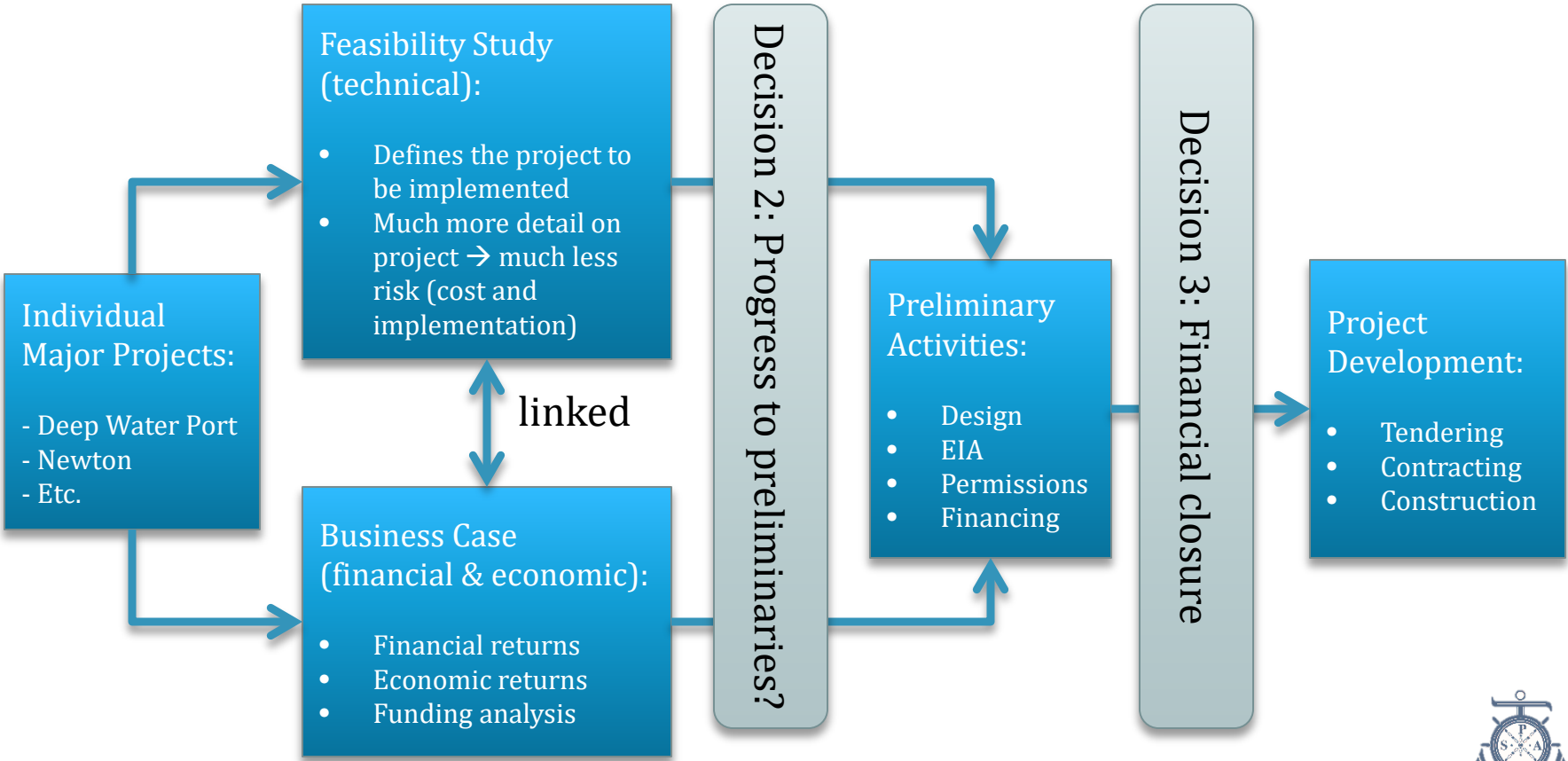


# Stornoway Port Masterplan

- Overall physical strategy scoping development concepts
  - Includes an element of “pre-feasibility study”



Decision 1: What projects to progress?



## Implementation resources

Once the final version of the masterplan is published, Stornoway Port Authority will start work on implementation.

The key steps comprise:

- Implementation plan.
- Business cases.
- Feasibility studies.
- Discussion with potential funders, with preparation of funding applications.
- Continued consultation with stakeholders and project partners.
- Project management of the delivery of individual components.

Given the ambitious scope of the masterplan, SPA will need to recruit additional personnel to undertake these tasks. Support for these positions might be available through support by HIE or other sources.



## APPENDIX A – POLICY REVIEW

## Scotland's Economic Strategy

The Scottish Government's purpose is to create a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. The Strategy focusses on two pillars to achieve this objective: increasing competitiveness and tackling inequality. This is underpinned by four priorities for sustainable growth:

- *Investment: Investing in our people and our infrastructure in a sustainable way.*
- *Innovation: Fostering a culture of innovation and research and development.*
- *Inclusive growth: Promoting inclusive growth and creating opportunity through a fair and inclusive jobs market and regional cohesion.*
- *Internationalisation: Promoting Scotland on the international stage to boost our trade and investment, influence and networks.*

## Scotland's National Marine Plan

Sets out strategic policies for the sustainable development of Scotland's marine resources out to 200 nautical miles. Of particular relevance is:

- *Achieving a sustainable marine economy: Infrastructure is in place to support and promote safe, profitable and efficient marine businesses. (HLMO 1); the marine environment and its resources are used to maximise sustainable activity, prosperity and opportunities for all, now and in the future. (HLMO 2)*
- *Ensuring a strong, healthy and just society: There is equitable access for those who want to use and enjoy the coast, seas and their wide range of resources and assets, and recognition that for some island and peripheral communities the sea plays a significant role in their community. (HLMO 9)*

## A Strategic Framework for Scotland's Marine Tourism Sector

This Strategic Framework, led by a working group of marine tourism industry leaders and user groups, is focused on the sustainable growth of Scotland's marine tourism sector, and seeks to develop and grow marine tourism in line with the ambitions and targets of the national tourism strategy Tourism Scotland 2020. The vision is to be:

- *A marine tourism destination of first choice for high quality, value for money and memorable customer experience delivered by skilled and passionate people.*

The mission is to develop and lead the growth of sailing tourism in Scotland from £101m of visitor expenditure to £145m by 2020, and to increase the overall economic value of the marine tourism sector from £360m to over £450m by 2020.



### HIE Operating Plan 2016 – 2019

This three year operating plan describes HIE's purpose, vision and priorities and sets out the actions to build the region's future.

- *Supporting businesses and social enterprises to shape and realise their growth aspirations.*
- *Strengthening communities and fragile areas.*
- *Developing growth sectors, particularly distinctive regional opportunities.*
- *Creating the conditions for a competitive and low-carbon region.*

HIE focuses on the sectors identified in SES: Food and Drink, Financial and Business Services, Life Sciences, Energy, Tourism and Creative Industries.

### HITRANS Regional Transport Strategy

The Regional Transport Strategy for the Highlands is concerned with enhancing the area's viability. This vision is underpinned by the following objectives:

- *Increase sustainable economic growth by enabling the area to compete and support growth.*
- *Enable people to participate in everyday life.*
- *Improve the safety and security of travel.*
- *Manage the impacts of travel on the area's environmental assets.*
- *Improve people's health.*

*The HITRANS strategy runs from 2008 to 2021 and is currently being renewed.*

### Outer Hebrides Local Development Plan

The Outer Hebrides Local Development Plan sets out the Comhairle's vision for the development of land throughout the Islands and provides the policy framework by which planning applications are determined.

The current plan was adopted in 2012 and a new plan is under development with a Proposed Plan published for consultation in January 2017. In response to the emerging Port Masterplan Plan the Comhairle has in this Proposed Plan incorporated a specific new LDP Policy recognising the Masterplan and development proposals within it, and seeking alignment with other LDP Policies.

Integral to and vital in informing the new LDP, the Strategic Environmental Assessment (SEA) and Habitats Regulation Appraisal (HRA) processes will run concurrent with all stages of the Plan's preparation.

### Regional Marine Plan

Following the publication of the National Marine Plan and the Marine Planning Circular, during 2016 the Development Plan and Marine Planning Team will initiate the process of forming a Marine Planning Partnership, in advance of the preparation of a Regional Marine Plan.

### Single Outcome Agreement (SOA)

The current Single Outcome Agreement, between the Scottish Government and Outer Hebrides Community Planning Partnership, covers 2013 to 2023 and sets out priorities which will focus the delivery of better outcomes for the people of the Outer Hebrides.

The SOA aims to create a prosperous, well educated and healthy community, enjoying a good quality of life and fully realising the benefits of the natural environment and the cultural traditions of the Outer Hebrides.



## APPENDIX B – SUMMARY ASSESSMENT OF ALTERNATIVES



## Overview

This section provides a summary of the process that was followed in developing alternatives for assessment, and the selection of the preferred option for the masterplan.

The first step was to identify a long list of possible high level proposals that satisfied the outline requirements. This list was influenced by the outcome of the stakeholder consultations and internal discussions with SPA, as well as the market assessment.

Secondly, competing individual projects were assessed and the weaker options rejected. Scenarios were then developed that met the outline requirements (listed opposite).

An objective appraisal framework was then constructed to assess each of the options. This framework was broadly consistent with a STAG (Scottish Transport Appraisal Guidance) based approach.

## Masterplan scenarios

1. Newton marina and Deep Water Port phase 1
2. Newton marina and Deep Water Port phases 1&2
3. Newton marina and Deep Water Port phases 1,2&3
4. Sandwick cruise and marina, and Deep Water Port 'Lite'
5. Sandwick cruise, Newton marina and Deep Water Port 'Lite'
6. Sandwick cruise, Newton marina, Linkspan Pier 3, Bulks Pier 1
7. Sandwick cruise and marina, Linkspan Pier 3, Bulks Pier 1
8. Sandwick marina and Deep Water Port phase 1
9. Sandwick marina and Deep Water Port phases 1&2
10. Sandwick marina and Deep Water Port phases 1,2&3
11. Sandwick marina phase 1, Newton phase 1, Deep Water Port phases 1,2&3



## Methodology

The framework was designed to make an objective-led assessment of the development options for Stornoway Port. The appraisal assesses each of the options in terms of the following:

- **Outline requirements:** To what extent the option can deliver the outline requirements, indicating the magnitude of positive or negative impact.
- **Implementability:** The likely level of risk associated with complexity and deliverability, technical feasibility and likelihood of stakeholder opposition.
- **STAG criteria:** The likely level of impact arising from each option in terms of Environment, Safety, Economy, Integration and Accessibility and Social Inclusion.
- **Fit with objectives:** The likely level of fit with Stornoway Port’s objectives and key Government objectives.
- **‘Funding fit’:** The extent to which each option might be able to attract funding from different sources.

All of the options have been scored against the criteria described above using the scale outlined opposite.

In addition to this appraisal, all of the scenarios have been costed.

## Appraisal scoring system

Assessment against:	Qualitative/numerical score	
Outline requirements	V. significant positive (5) Significant positive (4) Moderate positive (3) Slight positive (2) Very slight positive (1)	No impact (0) Slight negative (-1) Moderate negative (-2) Strong negative (-3)
Implementability criteria	Low risk (4) Low – medium risk (3) Medium risk (2)	Medium – high risk (1) High risk (0)
STAG criteria	As outline requirements	
Fit with objectives	Very strong fit (5) Strong fit (4) Moderate fit (3) Slight fit (2) Very slight fit (1)	Neutral (0) Slight conflict (-1) Moderate conflict (-2) Strong conflict (-3)
Funding fit	Very strong fit (5) Strong fit (4) Moderate fit (3)	Slight fit (2) Very slight fit (1)



## Appraisal results

		Outline requirements	Implementation & funding	STAG criteria	Objectives	Total score	Rank
Masterplan Scenarios	1. Newton marina and DWP phase 1	43	15	15	17	90	5
	2. Newton marina and DWP phase 1&2	45	16	16	17	93	3
	3. Newton marina and DWP phase 1,2&3	46	16	16	18	96	2
	4. Sandwick cruise and marina, and DWP Light	27	16	14	14	70	10
	5. Sandwick cruise, Newton marina and DWP Light	32	16	14	15	77	8
	6. Sandwick cruise, Newton marina, Linkspan Pier 3, Bulks Pier 1	29	15	14	14	71	9
	7. Sandwick cruise and marina, Linkspan Pier 3, Bulks Pier 1	24	15	13	13	65	11
	8. Sandwick marina and DWP phase 1	38	15	14	15	82	7
	9. Sandwick marina and DWP phase 1&2	40	16	15	17	88	6
	10. Sandwick marina and DWP phase 1,2&3	41	16	16	18	91	4
	11. Sandwick marina phase 1, Newton phase 1, DWP phase 1,2&3	47	16	16	18	97	1

## Selecting preferred option

The appraisal resulted in a defined outcome, with Scenario 11 clearly appraising as the best option. While Scenario 11 scored only slightly higher than Scenario 3, Scenario 11 is estimated to be less costly and allows for more long-term capacity development in marine leisure.

This was thus selected by Stornoway Port Authority as the preferred option and was presented in the draft masterplan for public consultation. Following consultation, (see Section 4), the development of a marina at Sandwick was removed from the masterplan.

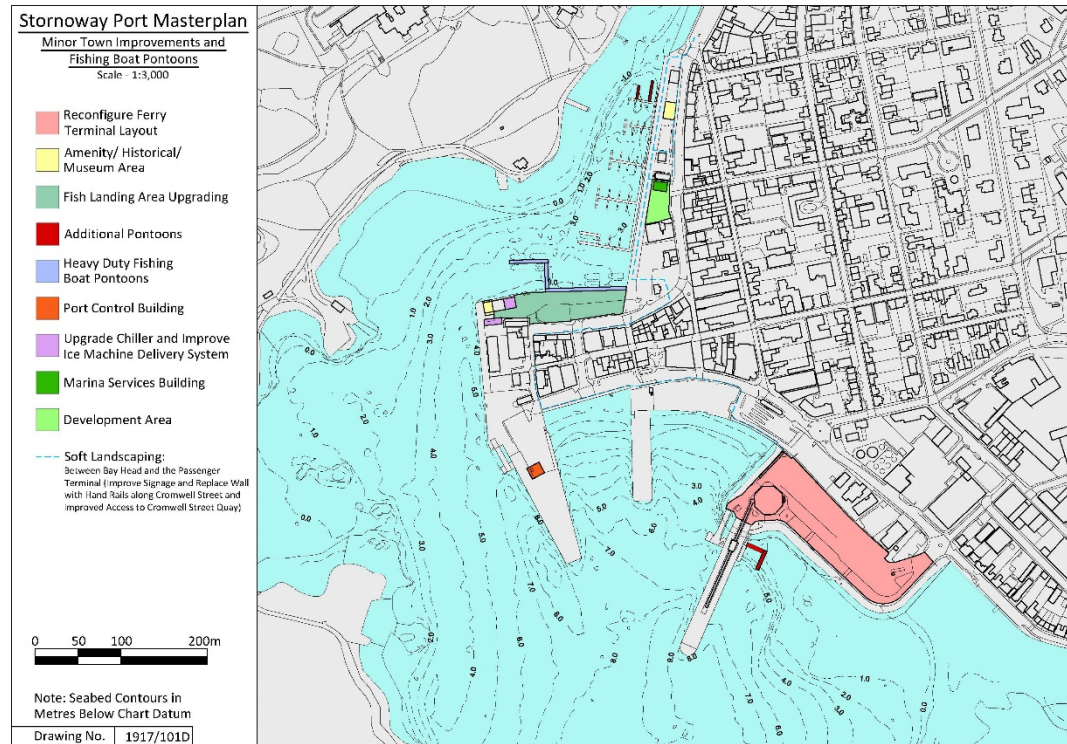


## APPENDIX C – DETAILED MASTERPLAN PROPOSALS

## i) Minor town improvements

This part of the masterplan covers a number of relatively small improvements that can be completed quickly but should have a significant impact on the Port. The key components of these improvements are as follows:

- **Ferry terminal:** following completion of the ferry terminal upgrade in 2015 and the introduction of the MV Loch Seaforth, there have been congestion problems around the parking and marshalling area and going onto the main road. Plans for reconfiguring the terminal are being drafted. Following further consultation the layout will be finalised.
- **Cruise tenders:** the pontoon on the East side of Pier 3 for the cruise tenders will be extended to reduce waiting time for passengers.
- **Facilities at Bayhead:** existing facilities (showers, toilets and laundry) at the marina are shared between fishermen and marina users, and this arrangement is not suitable. Separate, improved facilities for the fishermen and marina users will be installed. In addition, spare pontoons from the Lifeboat berth will be installed at north end of marina. This should add 10 to 12 berths for small vessels.
- **Fishing boat pontoons:** to improve safety, pontoons for fishing vessels will be installed along North Beach Quay for fishing boats. This will also allow vessels to plug in to an electricity supply.
- **Landscaping:** the main route through town for tourists and visitors, from the ferry terminal to the bridge at Bayhead, is in need of improvement. A combination of soft landscaping, additional seating and signage is proposed, together with replacing the wall along Cromwell St with hand rails, and improving access to Cromwell St Quay.
- **Fish market:** The fish landings area and fish market will be improved, and this will include an upgrade of the chiller and ice machine delivery system.
- **Port control building:** a single building on Pier 1 that will accommodate port authority operational employees.



ii) Bayhead

The concept for Bayhead is to build a tidal sill and footbridge across the bay from the northern end of Cromwell Street Quay to the Boatman’s House in the castle grounds. This would create a lagoon stretching 150 metres downstream from the Bayhead Bridge Centre.

With a tidal sill, the water depth in the lagoon would be kept at a minimum of 1.5 metres and would provide a safe environment for training in using sail boats, kayaks and canoes.

Some land reclamation is proposed for the shallow, northern end of Bayhead, providing space for some community type facilities.

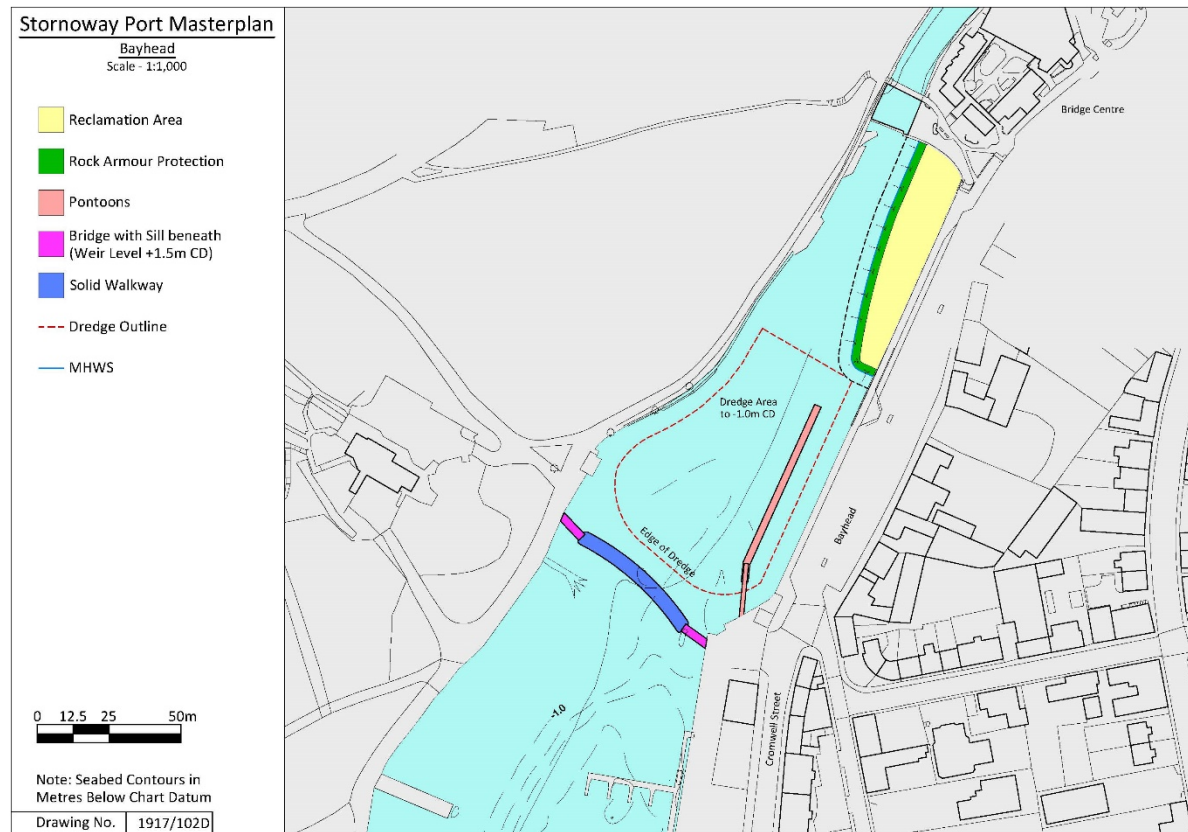
Pontoons would be installed along the east side of the lagoon.

The footbridge along the top of the tidal sill will provide a shorter access route into the Castle grounds for visitors coming from the passenger terminal or marina.

The shallow waters at the northern end of Bayhead detract from the views of the Lews Castle and grounds and the Port.

Development of a bridge and lagoon for boating should enhance the attractiveness of this area.

The pontoons would also provide additional capacity for visiting yachts during busy summer weeks, in particular Heb Celt Festival.





iii) Newton Basin

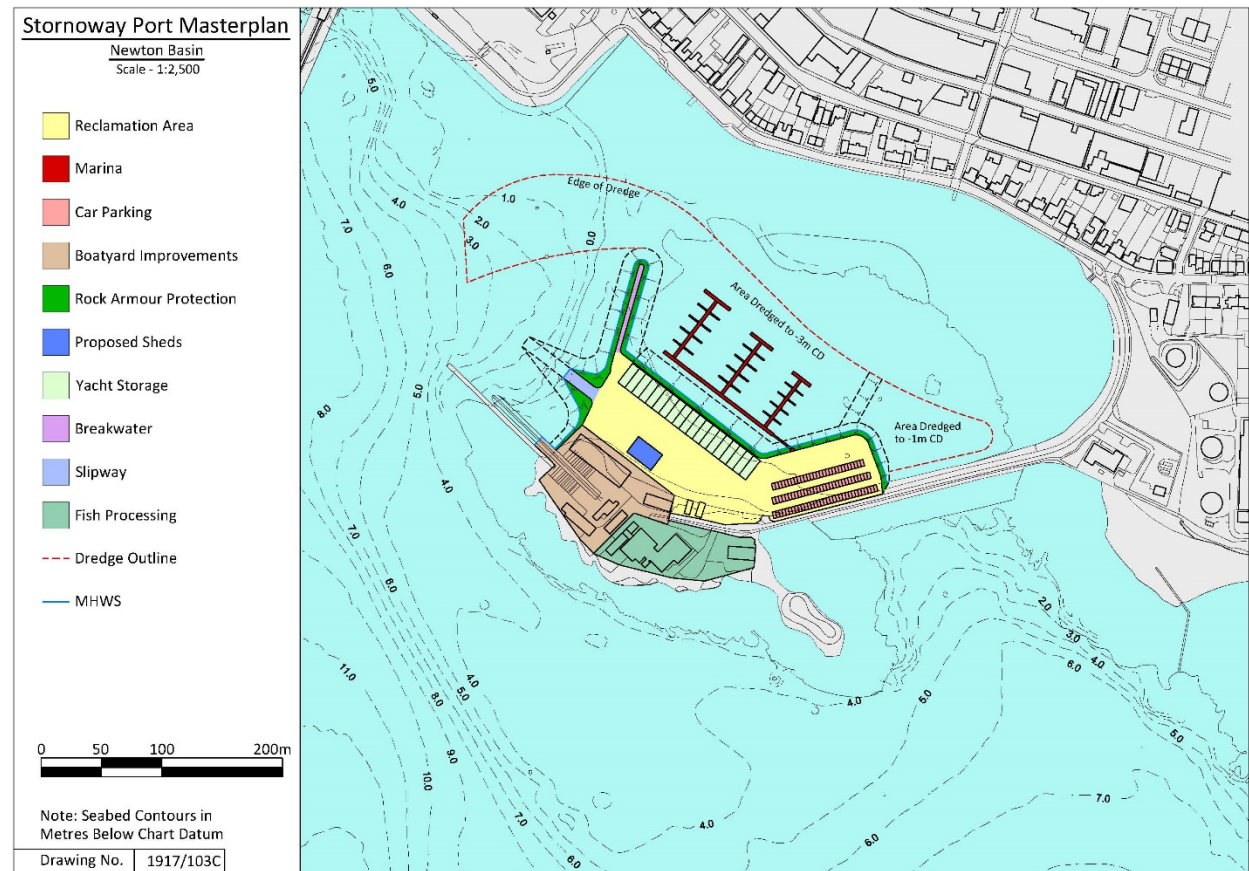
With the existing marina full during the summer months, additional berths are required. Newton Basin is an excellent location for a new marina. With a short breakwater and limited dredging, the marina would have around 72 berths.

Some land reclamation along the north side of Goat Island and causeway would provide space for:

- Marina services (club house, toilets, Yacht storage, showers, etc.).
- Economic development associated with a significant increase in leisure craft
- Parking
- Slipway and Yacht lift

The development of the new marina supports growth in the marine leisure sector.

The project also includes redevelopment of the boatyard site on Goat Island. This would improve the ship repair/painting facility, and provide a space for yacht repairs next to the new slipway.



**iv) Stornoway Deep Water Port**

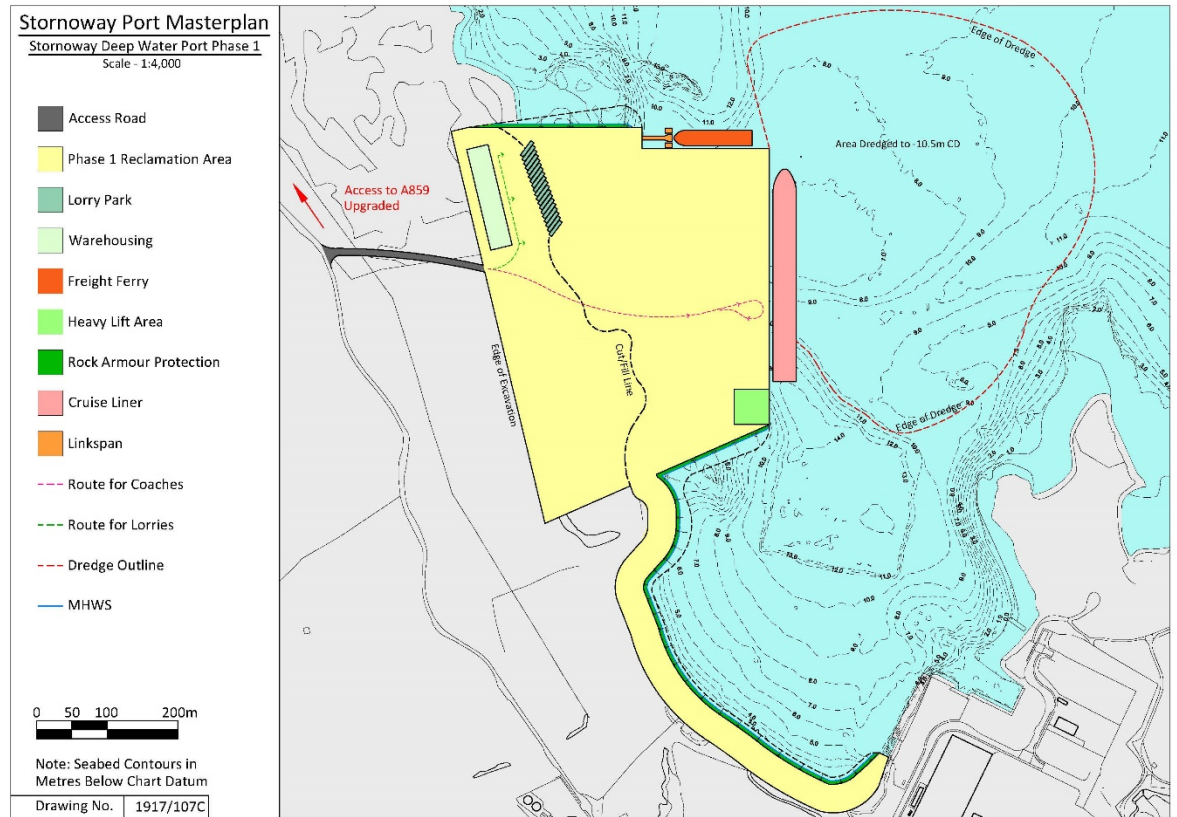
The creation of a Deep Water port across the bay to the south of the river Creed will allow for many of the existing Port activities that have a negative impact on the Town to be relocated, while also facilitating economic growth in a number of sectors.

The new Port would include 800 metres of quay (of which over 400 metres would be at 10m below CD), and around 29 hectares of lay down area. The main facilities at the port would be:

- A RoRo terminal to provide back-up to the existing linkspan on Pier 3, and also support a second ferry service focussing on freight.
- An extensive industrial base for the planned onshore wind projects, that could then be used to support future development of offshore wind, wave and tidal energy around the Outer Hebrides as well as oil and gas developments in the Atlantic.
- A cruise berth for vessels up to 330 metres in length, together with a bus marshalling area for passengers and access into the Castle grounds (via new footbridge).
- Space for relocating the oil terminal and storage tanks away from Town.
- Bulk cargo handling and storage.
- Warehousing.
- Re-routing (straightening) of the road from Arnish to the main road (A859).

The Deep Water port would be developed in three phases, from north to south (see figure over page). Phase 1 (see figure opposite) would comprise 400 metres of quay, 15 hectares of laydown area, ferry and cruise berths, re-routing of road access and direct road access to the existing development at Arnish.

The Deep Water port could also support the relocation of gas deliveries and new CCGT power plant.

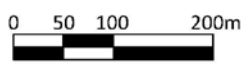


v) Stornoway Deep Water Port (continued)

**Stornoway Port Masterplan**

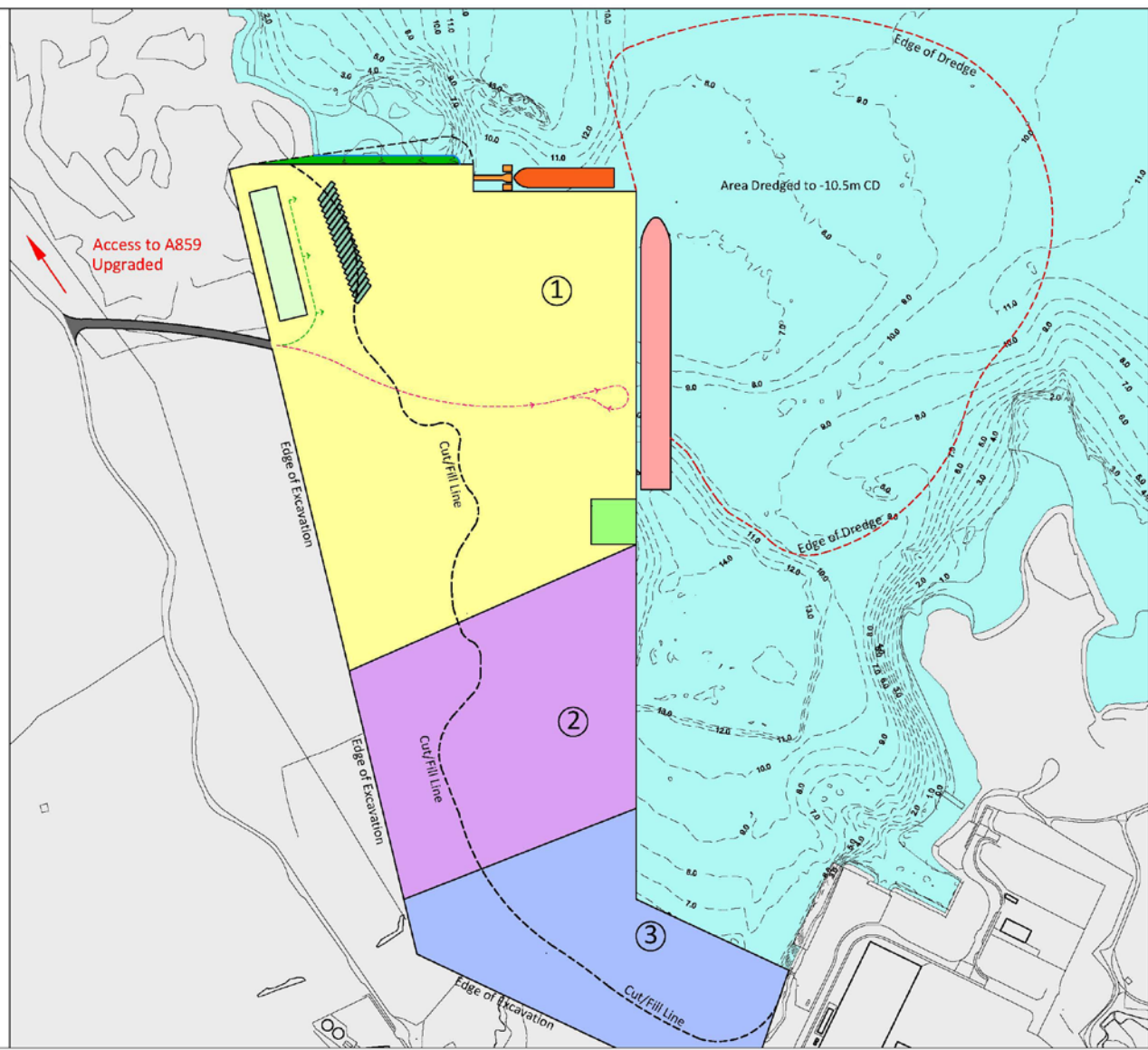
**Stornoway Deep Water Port**  
Scale - 1:4,000

- Access Road
- Phase 1 Reclamation Area
- Lorry Park
- Warehousing
- Freight Ferry
- Heavy Lift Area
- Rock Armour Protection
- Cruise Liner
- Linkspan
- Phase 2 Reclamation + Quay
- Phase 3 Reclamation + Quay
- Route for Coaches
- Route for Lorries
- Dredge Outline
- MHWS



Note: Seabed Contours in Metres Below Chart Datum

Drawing No. 1917/105C



## APPENDIX D – SOCIO-ECONOMIC IMPACT



## Overview

### **The masterplan has the potential to be transformational for Stornoway Port and the Outer Hebrides.**

Specifically, the masterplan proposals comprise enhancements of infrastructure and services that will deliver improvements and growth across a range of sectors including:

1. Cruise
2. Marina
3. Ferry
4. Boatyard
5. Fishing, aquaculture and fish processing
6. Town regeneration / development
7. Renewables – onshore wind, wave and tidal
8. Renewables – offshore wind
9. Oil and gas
10. Decommissioning
11. Construction.

**We estimate that successful implementation of the masterplan could generate £580 million in additional GVA over the next 30 years, and create an average of 203 additional direct full-time equivalent jobs by 2027.**

This Appendix offers a high level summary of what the potential benefits might be. A more detailed assessment of the potential impacts will be conducted in the development of detailed business cases for each of the masterplan proposals.

## 1. Cruise

West of Scotland is becoming an increasingly attractive cruise ground and Stornoway is already capitalising on this, with 66 liners scheduled in 2016 carrying around 23,000 passengers.

Stornoway has become an increasingly popular destination for cruise calls, ranked fourth in terms of total number of calls at Scottish ports in 2016, behind Orkney, Lerwick and Edinburgh. In 2016 Orkney had more than 120 scheduled calls and in excess of 100,000 passengers.

There is a mix of small and large ships calling, the smaller ones (up to 156m in length) are able to come alongside while the larger ones must anchor in the Bay and tender their passengers to shore.

With a new alongside berth there is a real opportunity for Stornoway to increase its cruise business significantly. All cruise operators prefer to berth rather than tender, and many will not consider a port where tendering is required. Furthermore, some new large vessels are being built without operating tenders. For vessels over 200m in length, Stornoway currently attracts less than one quarter of calls in Orkney.

Removal of the constraint could enable Stornoway to attract an additional 20 to 25 vessel calls per annum – increasing the volume of some existing calls by cruise companies such as P&O and Cunard, and attracting cruise companies who do not currently call at Stornoway. As part of a survey several major cruise companies (including Celebrity Cruises, Costa Line, MSC, TUI cruises and Carnival Group) stated that they would consider Stornoway as a port of call if alongside facilities were available.

It is estimated that passenger volumes could grow to a similar level as seen in Kirkwall (e.g. in excess of 100,000 passengers per annum) and there could be additional expenditure in the local economy of approximately £4 million per annum.



## 2. Marina

The Scottish Government's marine tourism strategy (Awakening the Giant) targets a 25% increase in the sector between 2015 and 2020, and Stornoway and the Western Isles are central to the strategy. This relatively modest growth target of less than 5% per year, should be readily achievable.

The masterplan includes the development of a marina at Newton Basin with 72 berths in the first phase.

The expansion of marina capacity will support growth in the number of visiting yachts, particularly in the peak months of June, July and August, as well as providing additional berths for resident boat owners.

It is expected that around 40 of the new berths will be for residents, while the remaining new berths could attract up to 8,500 additional visitor boat nights by 2025.

The additional yacht visits will increase demand for a wide range of supplies and services including chandlery, yacht maintenance and repair, fuel, food and restaurants.

It is estimated that additional expenditure in the local economy generated by the marina would be around £400,000 per year following the development of Newton Bay.

## 3. Ferry

Stornoway Port is a key hub in the ferry network, providing infrastructure for the lifeline ferry services between Ullapool and Stornoway.

While there have been relatively recent infrastructure upgrades to support a new ferry coming on stream, there have been issues recently with regards to capacity. The introduction of RET (Road Equivalent Tariff) has resulted in a significant increase in tourism traffic during peak months, which has implications for local passenger and freight traffic: ferry travel has to be booked well ahead of time, which is not convenient and there have been increasing instances of passengers not being able to travel on the day because the ferry is full.

While the number of commercial vehicles has fallen (largely as a result of the economic downturn and impact on construction sector), capacity constraints will become more serious as and when the economy grows and freight volumes pick up.

Stornoway Port is providing additional infrastructure that can accommodate a second ferry (freight) vessel in the future which should go some way to mitigating the potential capacity issues and supporting economic growth for the Western Isles.

GVA and employment impacts relating to this have not been included in the analysis.





## 4. Boatyard

Stornoway has one of the few boatyards on the west coast of Scotland providing vital repair, maintenance and engineering services for the fishing, aquaculture and marine leisure sectors.

Located on Goat Island, the boatyard can accommodate vessels up to 45 metres LOA and up to 800 tonnes in weight.

The work is varied, comprising annual maintenance, full overhauls, painting, generally engineering work and other repairs. The boatyard also conducts many engineering-related repairs for boats visiting the Port, including yachts and leisure boats.

The current layout of the boatyard is inefficient – work is not conducted in one place, but across three separate workshops. The lack of a covered facility has a significant impact on the business in terms of efficiency and operability. Painting can only be done outside in good weather and is often delayed as a result of bad weather – this is increasingly the case over the last three to five years. As a result some business has been lost to mainland boatyards.

There is an immediate requirement for a substantial refurbishment of the yard on Goat Island. This includes upgrading of the cradle and slipway and construction of a large shed for year-round painting and other maintenance work.

The boatyard should be able to:

- Increase efficiency considerably by enabling painting all year round – this will reduce delays and increase level of output.
- Develop new boat building business and carry out more major overhauls.
- Potentially attract maintenance work from CalMac for inter-island vessel fleet.
- Increase yacht maintenance and repair in Stornoway, a rapidly growing market.
- Capture engineering work from renewables and oil and gas sectors once these come on stream.

There is significant potential for the boatyard to increase its turnover substantially – even double in the short to medium term, with a similar increase in employment levels.



## 5. Fishing, aquaculture and fish processing

While the local fleet in Stornoway is small, it has been relatively stable over the last few years. The value of landings in the Hebrides generally averages around £10 million per year and catches are dominated by nephrops (langoustine), accounting for around 45% of landings by volume and 60% by value.

Processing of the catch is limited: fish are chilled and trucked/ferried to the mainland, while most crustaceans are sent to the facility on Goat Island for cleaning and chilling, before being trucked/ferried to the mainland for final preparation and packaging.

Most of the fishing is within the Minch, and few large vessels operate from Stornoway.

The improvement of facilities (e.g. pontoons, ice machine, boatyard upgrade, etc.) will go some way to safeguarding jobs in these sectors.

The improvements planned for Goat Island will enable the fish processing industry to expand, increasing value added and creating new jobs. An increase in fish processing will require an additional 15 jobs at sea, and an estimated 12 to 24 ashore.

With the development of new infrastructure, there is also potential to develop a cluster of support industries supplying the fishing, aquaculture and seafood processing sectors.

## 6. Town regeneration / development

The masterplan includes several proposals that will impact on the Town's physical fabric, creating opportunities to develop new buildings, facilities and businesses. This will lead to economic benefit, as well as making the Town more attractive.

The relocation of the oil tanks out of the Town centre will free up a prime area which could be developed with a consumer facing role in mind or for housing.

The Bayhead development focuses on improving the connectivity between the Town centre and the waterfront and will encourage the development of new facilities and businesses along the waterfront.

Cruise and marina proposals in particular result in a significant increase in footfall around the Town centre. In addition, the creation of new access points to the Castle Grounds/Gardens will substantially increase footfall there, which will generate additional income for the museum and café's in particular – this may also encourage further businesses to start up or expansion of those already there.

Taking the masterplan proposals as a whole, the creation of new jobs and activities will generate the need for products and services, which could act as a catalyst for new development, such as retail outlets, hotel accommodation and tourist attractions, for example.

GVA and employment impacts relating to this have not been included in the analysis.



## 7. Renewables – onshore wind, wave and tidal

Stornoway Deep Water Port development will have a transformational impact on the Port and the local community. Only the development of this proposal will enable the Port to realise opportunities in the renewable energy and oil and gas sectors.

Some of the best renewable energy resources in Europe are found around the Outer Hebrides. The *Scottish Island Renewable Project (2013, DECC)* states that the Western Isles, Orkney and Shetland could supply up to 5% of Britain's total electricity demand by 2030. A recent Scottish Government report '*Economic Opportunities of Renewable Energy for Scottish Island Communities (2016)*' provides a forecast of jobs and GVA associated with onshore wind, tidal and wave power development in the Western Isles.

Based on this report it is estimated that onshore wind projects resulting from the Deep Water Port development could generate 75 full time jobs per annum by 2025 to support operation and maintenance activities. The construction phase could create up to 120 FTE jobs. The impact of wave and tidal developments have been excluded from our initial estimates due to uncertainties over technology developments and continued Government support.

## 8. Renewables – offshore wind

Offshore wind represents another key opportunity for Stornoway Port, and could deliver similar employment impacts as that for onshore wind.

Stornoway is well placed to provide a marshalling and support base for wind farm installation and maintenance, for farms around the Hebrides and northern Irish Sea. While this could realise similar impacts as for onshore wind, at this stage it is difficult to estimate, as technologies are constantly changing.

Offshore wind developments are unlikely to commence in the short to medium term, rather will follow on from the onshore wind developments. GVA and employment impacts relating to this have not been included in the analysis.

## 9. Oil and gas

With the 29<sup>th</sup> Licensing Round focussing on the Rockall Basin, a significant amount of exploratory work is expected west of the Outer Hebrides. There is huge potential for Stornoway Port to capitalise on this, as it is ideally located to provide a support base for exploration, and possibly later development and production activities. This could result in significant benefit for the Port and the wider community, through attracting new businesses to Stornoway, increasing the capabilities of the supply chain and potentially increasing the population.

There is uncertainty over the scale of operations at Stornoway, but the potential is substantial. Our working assumption is that a small operational support base will be developed from 2025, initially creating 30 direct full time equivalent (FTE) jobs and this would rise to 100 FTE jobs by 2029.

## 10. Decommissioning

With an increasing number of UK field offshore platforms now being decommissioned, there is potential for the Port to take a share of this market.

## 11. Construction phase

The impact of construction is temporary, lasting only as long as the construction of infrastructure takes.

Although most of the construction activities are specialised, it is hoped that most of the workforce required can be locally employed. The local area is also likely to derive other benefit from expenditure in the area by additional construction workers (accommodation, spending in shops, bars, restaurants, etc.) and by construction firms sourcing materials and supplies from the local area.

