



**Scottish & Southern**  
Electricity Networks

# SHORE END REMEDIAL CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

BMC Ref: CB0262-1003

17<sup>th</sup> October 2023

Prepared by:  
Briggs Marine Contractors Ltd.  
Seaforth House  
Seaforth Place  
Burntisland  
KY3 9AX  
Tel: +44 (0)1592 872939  
[www.briggsmarine.com](http://www.briggsmarine.com)

## CONTENTS

1. OVERVIEW .....	6
1.1 Introduction .....	6
1.1.1 - Scotland's Marine Plan .....	6
1.2. Project Description .....	7
1.2.1. Overview.....	7
1.2.2.Decommissioned OOS cables .....	9
1.2.3. Installation of split pipe .....	9
1.2.4 Reburial of exposed sections of cable .....	9
1.3. Construction Programme .....	10
1.4. Onsite Roles and Responsibilities .....	10
2. GENERAL ARRANGEMENTS .....	12
2.1. Hours of Work .....	12
2.2. Management of Works .....	12
2.3. Communication and Monitoring .....	13
2.4 Environmental emergency contacts.....	14
3. SITE MANAGEMENT .....	15
3.1. Site Layout and Housekeeping .....	15
3.2. Site Traffic.....	15
3.3. Plant and Equipment.....	15
3.4. Contractor's Plant .....	15
3.5 Lighting.....	15
4. SITE SPECIFIC ENVIRONMENTAL MANAGEMENT .....	16
4.1. Introduction .....	16
Environmental mapping for Loch Glasscarnoch .....	17
Environmental mapping for Stronsay – Sanday (Sandy landfall).....	18
Environmental mapping for Mainland Orkney – Graemsay (Graemsay landfall).....	19
Environmental mapping for Islay – Orsay .....	20
Environmental mapping for Loch Awe .....	22
Environmental mapping for Mull – Ulva (Ulva Landfall) .....	23
Environmental mapping for Carradale – Arran South (Arran landfall) .....	25
Environmental mapping for Mull – Iona (Mull landfall) .....	26
Harbour Jurisdiction.....	28
CEMP Requirements.....	29
5. WATER QUALITY PROTECTION AND POLLUTION .....	31
5.1. Prevention .....	31
5.1.1. Introduction.....	31
5.1.2. Drainage Management Strategy .....	31
5.1.3. Pollution Prevention .....	31

5.1.4. Watercourse Crossing.....	31
5.1.5. Water / Ground Contamination (from Spillage).....	31
5.1.6. Fuel storage.....	32
5.1.7. Pollution Control.....	32
5.1.8. COSHH Assessment.....	32
5.1.9. Welfare Facility.....	32
5.2. Air Quality.....	32
5.2.1. General Principals.....	32
5.2.2. Environmental Control Measures.....	32
5.3 WORKING IN OR NEAR SURFACE WATERS.....	33
5.3.1. General.....	33
5.3.2 Surface Water Control.....	34
5.4 WASTE MANAGEMENT.....	34
6. NOISE AND VIBRATION.....	35
6.1. General Principals.....	35
7. EMERGENCY PROCEDURES.....	35
7.1. Introduction.....	35
7.2. Incident Reporting.....	35
8. BREEDING BIRD PROTECTION.....	35
9. OTTER PROTECTION.....	35
10. REINSTATEMENT.....	35
11. BAD WEATHER.....	36
12. BIOSECURITY.....	36
APPENDIX 1 – Correspondence and commitments register.....	37

**List of figures**

Figure 1 - Cross section of proposed burial.....	9
Figure 2 - Environmental Sensitivities near to work at Loch Glasscarnoch.....	17
Figure 3 - Environmental Sensitivities near to work at Stronsay - Sanday.....	18
Figure 4 - Environmental Sensitivities near to work at Mainland Orkney – Graemsay.....	19
Figure 5 - Environmental Sensitivities near to work at Islay - Orsay.....	20
Figure 6 - Environmental Sensitivities near to work at Loch Awe.....	22
Figure 7 - Environmental Sensitivities near to work at Mull - Ulva.....	23
Figure 8 – Seal haul out locations on Mull – Ulva, where purple indicates a haul-out site.....	24
Figure 9 - Environmental Sensitivities near to work at Carradale – Arran South.....	25
Figure 10 - Environmental sensitive areas near to Mull - Iona.....	26
Figure 11 - Seal haul out locations on Mull, where purple indicates a haul-out site and the blue indicates a breeding colony haul out site.....	27
Figure 12 – Statutory harbour limit for Mainland Orkney - Graemsay.....	28



**List of Tables**

Table 1 - Working corridor coordinates ..... 7  
 Table 2 - Planned works at each location..... 8  
 Table 3 - Roles and Responsibilities on site ..... 10  
 Table 4 - Management Roles ..... 12  
 Table 5 - Planned Communications ..... 13  
 Table 6 - Emergency contacts..... 14  
 Table 7 - Site Specific Designations..... 16  
 Table 8 - CEMP Requirements..... 29

**Amendment Register**

Revision	Date	Issued by	Approved by	Amendments
R1.0	09/10/23	JR	SG	
R2.0	13/10/23	JR	MH	
R3.0	17/10/23	JR	MH	
R4.0	10/11/23	JR	SG	

**Abbreviations**

Abbreviation	Definition
BMC	Briggs Marine Contractors – Principal Contractor
ECoW	Environmental Clerk of Works
EIA	Environmental Impact Assessment
HRA	Habitats Regulations Assessment
MHWS	Mean High Water Spring
MLWS	Mean Low Water Spring
NNR	National Nature Reserves
PAC	Pre-Application Consultation
SAC	Special Area of Conservation
SEPA	Scottish Environmental Protection Agency
SFF	Scottish Fishermen’s Federation
SHEPD	Scottish Hydro Electric Power Distribution



---

SPA	Special Protection Area
SPP	Scottish Planning Policy
SSEN	Scottish & Southern Energy Networks - Client
SSSI	Site of Special Scientific Interest
RAMSAR	Wetland site designated of international importance under the Ramsar Convention
WFD	Water Framework Directive

# 1. OVERVIEW

## 1.1 Introduction

This Construction Environmental Management Plan (CEMP) has been prepared by Briggs Marine contractors (BMC) on behalf of Scottish Hydro Electric Power Distribution plc (SHEPD).

During routine inspections by SHEPD, essential maintenance works were identified to ensure a secure, safe supply of electricity to the islands and ensure the safety of the public when using the beaches. BMC have been contracted to carry out these works.

The proposed locations are:

Mull – Iona – (Mull landfall)

Mull – Ulva (Ulva landfall)

Islay – Orsay

Loch Awe

Loch Glasscarnoch

Carradale – Arran South (Arran landfall)

Stronsay – Sanday (Sanday landfall)

Mainland Orkney – Graemsay (Graemsay landfall)

This plan details project specific construction and environmental management measures in respect of works associated with maintenance work on the exposed electricity cable at the shoreline locations.

### 1.1.1 - Scotland's Marine Plan

Scotland's National Marine Plan is a framework for maritime spatial planning and aims to promote the sustainable development of marine areas, resources, and users.

The proposed project consists of maintenance work on existing electricity cables:

- Reburial of exposed sections at the shore end (from MLWS to MHWS), where burial isn't achievable then;
- Manual placement of iron shells along the exposed cables for their protection.
- Removal of old concrete bags previously used as protection.
- Three subsea disconnected cables need removed from MLWS to shore.

The works will have little effect in relation to landscape or seascapes as it is a minor change in the visual aspects of an existing exposed piece of infrastructure. There are also no marine noise effects associated with the proposed works. Due to the scale of the proposed works and the very limited nature of the effects on the marine environment from placing a number of iron shells onto the foreshore, reburial of sections of exposed cable and removal of disconnected subsea cables from low water to shore, it was concluded that further consideration of the policies within the National Marine Plan was not necessary.

This CEMP provides information and guidance on the following topics:

- Waste Management;
- Air Quality;
- Water Quality Protection and Pollution Prevention;
- Soil Management;
- Ecology;
- Cultural and Heritage; and
- Emergency Procedures.

This document also provides further detail and control measures, and include:

- Otter control measures
- Breeding Bird Control measures

This CEMP is a live document that will be reviewed at regular intervals by Briggs onsite environment team and the appointed Environmental Clerk of Works (ECoW) to reflect the progress of works, any changes in

environmental requirements and to account for any emerging best practice or updates (from either statutory bodies or client/contractor best practice).

## 1.2. Project Description

### 1.2.1. Overview

The proposed project will see cable repairs at nine sites, the figures overleaf show the remedial work required and also please refer **Error! Reference source not found.** that gives the coordinates of the proposed marine licence working corridor. Please also note that Loch Awe and Loch Glasscarnoch do not require a marine licence for these works due to being situated within inland waters.

**Table 1 - Working corridor coordinates**

LANDFALL	Remedial Location	NW Corridor	NE Corridor	SW Corridor	SE Corridor
Sanday	59° 12.550'N 2° 40.047'W	59° 12.530'N 2° 40.070'W	59° 12.497'N 2° 39.943'W	59° 12.672'N 2° 39.412'W	59° 12.654'N 2° 39.436'W
Graemsay	58° 55.937'N 3° 16.101'W	58° 55.983'N 3° 16.195'W	58° 55.992'N 3° 16.163'W	58° 55.910'N 3° 16.098'W	58° 55.919'N 3° 16.038'W
Islay and Orsay	55° 40.585'N 6° 30.438'W (Islay) No location for Orsay, as site visit was unachievable	55° 40.587'N 6° 30.410'W	55° 40.592'N 6° 30.445'W	55° 40.501'N 6° 30.599'W	55° 40.504'N 6° 30.609'W
Ulva	56° 28.889'N 6° 9.182'W	56° 28.876'N 6° 9.164'W	56° 28.930'N 6° 9.203'W	56° 28.932'N 6° 9.181'W	56° 28.877'N 6° 9.143'W
Arran (South)	55° 35.758'N 5° 22.790'W	55° 35.769'N 5° 22.788'W	55° 35.746'N 5° 22.769'W	55° 35.764'N 5° 22.839'W	55° 35.737'N 5° 22.814'W
Mull (Iona)	56° 20.434'N 6° 21.507'W	56° 20.440'N 6° 21.515'W	56° 20.431'N 6° 21.520'W	56°20.435'N6° 21.492'W	56°20.427'N 6° 21.496'W
Loch Awe	56° 20.403'N, 5° 9.440'W (Position of cable exposure)	Not required as marine licence not a requirement	Not required as marine licence not a requirement	Not required as marine licence not a requirement	Not required as marine licence not a requirement
Loch Glasscarnoch	57° 42.652'N, 4° 49.208'W  57° 42.425'N, 4° 49.631'W  (Position of cable exposure(s) – both sides of the Loch)	Not required as marine licence not a requirement	Not required as marine licence not a requirement	Not required as marine licence not a requirement	Not required as marine licence not a requirement

Please refer to **Error! Reference source not found.** for areas that will require the following methods during the works:

**Table 2 - Planned works at each location**

Cable Route	Landfall	Cable Removal	Split pipe installation	Concrete Bag Removal	Cable Burial
1. Loch Glasscarnoch SSEN 92	Loch Glasscarnoch	Yes	Yes – allow for a maximum of 150m	No	Where possible at the road side of the Loch only. No cable burial loch side of Glasscarnoch
2. Stronsay-Sandy SSEN 16	Sanday	Yes (100m)	No	No	Where possible
3. Orkney-Graemsay SSEN ID NOT KNOWN	Graemsay	Yes (30m)	No	No	Where possible
4. Islay-Orsay SSEN 42	Orsay	No	Yes – allow for a maximum of 40m	No	Where possible
5 Loch Awe SSEN 78	Loch Awe	No	Yes – 2-3m required	Yes	Where possible
6. Mull-Ulva SSEN 80	Ulva	No	Yes – allow for a maximum of 5m	No	No
7. Carradale Arran (South) SSEN 94	Arran	No	Yes – allow for a maximum of 30	No	Where possible
8. Mull-Iona SSEN 57	Mull	No	Yes – allow for a maximum of 10m	No	Where possible



### 1.2.2.Decommissioned OOS cables

The disconnected cables that have been disconnected from distribution network will require:

1. Mobile welfare unit and general hand held cutting equipment mobilised to site
2. Disconnect subsea cable to be cut within the marine channel at low water
3. The cable will be then be cut, with hand held cutting tool, b) earthed and c) capped, with cold shrink cap at low water. The cut cable will then be removed from low water and shore environment.

### 1.2.3. Installation of split pipe

1. Placement of split pipe/iron shells.
2. Mobilisation of 7 tonne excavator, mobile welfare unit (suitable for a max. of 8 personnel) and equipment close to the project location. With the exception of Mull-Ulva (Ulva landfall), where delivery of split pipe will be by landing craft.
3. The iron half shells will be delivered by HIAB lorries close to the project location (with the exception of Mull-Ulva Island).
4. Iron shells will then be transferred from the HIAB lorry into a tracked excavator for transport to the cable
5. Where necessary, loose stones from low water or shore end will be cleared from around the cable using a small excavator or manually by hand
6. Individual iron half shells will be manually placed around the exposed cable. To ensure that they sufficiently cover the cable the two half shells will be fused together.
7. The half shell will then be secured to each other and held in place by clamps.
8. Removal of any excess shells and equipment from the project locations.
9. The shells will stay in place until further maintenance work is required.

### 1.2.4 Reburial of exposed sections of cable

1. Mobilisation of 7 tonne excavator, mobile welfare unit and equipment close to project location
2. Where the cable is exposed between both landfalls these areas require burial the of exposed cable where possible from MLWS to MHWS..
3. This will be achieved by using a 7 tonne excavator to create a trench alongside the existing cable route.
4. The existing cable will then be secured within the trench.
5. This will then be backfilled with 'won ' material, to ensure minimal disruption to ecological habitats. Please also refer to Figure 1 for cross section of proposed burial.

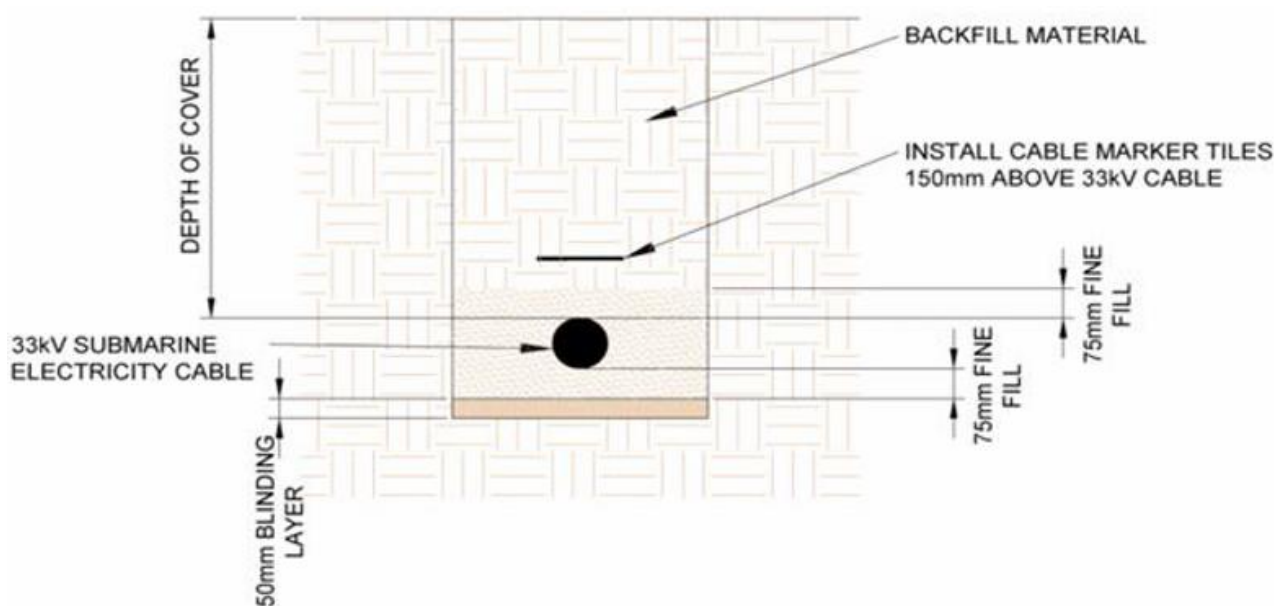


Figure 1 - Cross section of proposed burial

The proposed works to all site locations would commence as soon as feasible to do so tide/weather permitting. Access will be taken using existing access tracks where possible and the excavator will be tracked.

### 1.3. Construction Programme

Works will take place when an appropriate tide will permit. This should be achieved between February and April 2024 for all sites.

### 1.4. Onsite Roles and Responsibilities

The roles and responsibilities of those onsite with a responsibility to manage environmental risk are described in Table 3.

**Table 3 - Roles and Responsibilities on site**

Role	Responsibility	Contact details
SSEN Project Manager	<ul style="list-style-type: none"> <li>Oversee the project to ensure all works are carried out effectively and within the Works Information Package.</li> </ul>	Kevin Wilson, Tel: <Redacted> , Mob: <Redacted> <Redacted>
Site Supervisor	<ul style="list-style-type: none"> <li>Ensure the implementation of the CEMP;</li> <li>Ensure that the workforce is made aware of environmental risks/issues associated with the project;</li> <li>Ensure that environmental incidents are reported to the company Helpline and Client in line with reporting timescales and requirements;</li> <li>Ensure that environmental issues are included in site management meetings;</li> <li>Ensure that site environmental controls are regularly monitored and recorded; and</li> <li>Ensure environmental risk assessments are up to date and changes to the construction site posing environmental risk are recorded on the risk assessment, and where necessary updates/amendments to the CEMP are completed.</li> </ul>	Andy Black <Redacted> <Redacted> <Redacted>
BMC Assistant Project Manager	<ul style="list-style-type: none"> <li>Oversee the project to ensure that the CEMP is completed</li> <li>Ensure that the workforce is made aware of environmental risks relating to the project;</li> <li>Ensure environmental risk assessments are up to date and changes to the construction site posing environmental risk are recorded on the risk assessment;</li> <li>Assisting SSEN with Landowner liaison/coordination</li> </ul>	Jessica Reoch <Redacted> <Redacted>
BMC Site Foreman	<ul style="list-style-type: none"> <li>Ensure the implementation of this plan;</li> <li>Ensure that the workforce is made aware of environmental risks relating to the project during daily TBTs;</li> </ul>	Andy Black <Redacted> <Redacted>

	<ul style="list-style-type: none"> <li>• Ensure that environmental incidents are reported to the company Helpline and Client in line with reporting timescales and requirements;</li> <li>• Ensure that environmental issues are included in site management meetings;</li> <li>• Ensure that site environmental controls are regularly monitored and recorded;</li> <li>• Inform BMC PM of any new environmental risk</li> </ul>	
Role	Responsibility	Contact details
ECoW	<ul style="list-style-type: none"> <li>• Undertake pre-construction site walk over of all proposed work sites</li> </ul> <p>Co-ordinate and manage the identified environmental issues on the project</p> <ul style="list-style-type: none"> <li>• Ensure the implementation of this plan;</li> <li>• Provide support on any environmental issues on the Project;</li> <li>• Ensure environmental risk assessments are up to date and changes to the construction site posing environmental risk are recorded on the risk assessment, and where necessary updates/amendments to the CEMP are completed;</li> <li>• Ensure that the Project Manager is made aware of environmental risks relating to the project so this can be passed to the workforce during daily TBTs;</li> <li>• Provide additional technical support to the Project as required by the Project Manager/Site Supervisor/Contractor Project Manager; and</li> <li>• Investigate any significant environmental incidents that occur on the Project.</li> </ul>	TBC

## 2. GENERAL ARRANGEMENTS

### 2.1. Hours of Work

Most construction activities will be undertaken on Monday to Sunday between 07:00 and 19:00, daylight and tide dependant. If works are to commence out with these timings and/or across the weekend, permissions will be confirmed with local LPA and weekend working hours will be adhered to in each regional area.

### 2.2. Management of Works

Table 4 shows the project management roles and named personnel accountable for and relevant to the implementation of the CEMP.

**Table 4 - Management Roles**

Role	Name and contact details
SSEN Project Manager	Kevin Wilson <Redacted> <Redacted>
SSEN Project Environmental Manager	Katy Urquhart <Redacted> <Redacted>
SHE (Safety Health Environment)	Paul Webster <Redacted> <Redacted>
Site Supervisor	Andrew Black <Redacted> <Redacted>
BMC Project Manager	Jessica Reoch <Redacted> <Redacted>
WSP Contact	TBC

### 2.3. Communication and Monitoring

Table 5 describes the mechanisms for the communication of environmental risk and the frequency at which they shall be completed.

**Table 5 - Planned Communications**

Meeting/Briefing	Frequency
HSEQ and Progress Meeting	Weekly
Daily site team briefs	Daily
Risk Assessment/Method Statement briefings	Each job task
Environmental Toolbox Talks including good environmental practice	Minimum of one per fortnight
Site Induction	On first attendance at site
Suitable monitoring of the CEMP implementation	Identified activity of the ECoW

## 2.4 Environmental emergency contacts

Table 6 - Emergency contacts

Contact	Contact details
BMC Project Manager	Jessica Reoch <Redacted> <Redacted>
SSEN Project Environmental Manager	Katy Urquhart <Redacted> <Redacted>
SHE (Safety Health Environment)	Paul Webster <Redacted> <Redacted>
SSEN 30 Minute Reporting Line	0800 096 6210
WSP Contact	TBC
SEPA Emergency Environmental event contact number	0800 80 70 60
SEPA Flood line	0345 988 1188
Scottish Water	0800 0778 778 (24 hours)
Nature Scot	Great Glen House Leachkin Road Inverness IV3 8NW T: 01463 725 000
Argyll and Bute Council	Argyll and Bute Council, Kilmory, Lochgilphead, Argyll, PA31 8RT T: 01546 605522
Orkney Council	School Place Kirkwal Orkney, KW15 1NY T: 01856 873535
Highland Council	The Highland Council Headquarters Glenurquhart Road Inverness IV3 5NX Out of hours: 01349 886690

### **3. SITE MANAGEMENT**

#### **3.1. Site Layout and Housekeeping**

Mobile welfare units will be available to site personnel and will not require any ground preparation. Material laydown areas shall be limited to short durations and be in the immediate vicinity of the works, i.e. iron shells delivered to site prior to work commencing.

The site will be maintained in a tidy and well-managed state at all times.

#### **3.2. Site Traffic**

Traffic during construction will be minimal and restricted to a small number of works vehicles and machinery. Access will be taken using existing access tracks where possible. All traffic shall be escorted in by approved site personnel.

#### **3.3. Plant and Equipment**

Construction vehicles and plant shall be regularly maintained. Emergency maintenance to construction plant will be carried out on site, where practicable, in a designated area and on an impermeable surface. In order to contain any environmental risk posed by vehicle and plant maintenance.

A lockable bunded fuel bowser constructed in accordance with SEPA Guidelines – Guidance 2, will be used for refuelling on site.

In the first instance, please refer to Appendix B CB0262 – 1003 GEMP, where GEMP 7 – Oil storage and refuelling should be implemented.

Where practicable, refuelling shall take place at a dedicated refuelling area. Where this is impracticable, a nominated Fuel Marshal shall be responsible for overseeing refuelling activities and to ensure that refuelling of mobile plant does not take place within 30 m of a water environment. The refuelling bowser shall be equipped with a spill kit (refer to section 7.2 – Emergency procedures, for information regarding spill kits) and personnel will be trained in their use as part of the site induction training.

All construction vehicles and mobile plant operators shall have easy access to spill kits during vehicle and mobile plant operation through a combination of vehicle spill kits and larger capacity fixed location spill kits.

Plant nappies/drip trays shall be utilised for stationary plant and regular inspection arrangements shall be in place. Where plant is left stationary in excess of one hour, plant nappies will be required. No idling is permitted on plant and vehicles on site, to reduce unnecessary emissions from being released.

#### **3.4. Contractor's Plant**

BMC will provide a list of plant proposed to be used to undertake the works. The BMC Project Manager must be provided with this list prior to works commencing. It will be the responsibility of the SSEN Project Manager to approve all as appropriate.

#### **3.5 Lighting**

Lighting will be directional and positioned to minimise light spill outside the site compound/works area. Particular care should be taken to avoid spill on known sensitive receptors (such as the shore).

No artificial lighting should directly illuminate otter foraging/commuting habitat and/or be left on overnight in proximity to such features unless authorised by the appointed ECoW.

It is not anticipated that artificial lighting will be required due to adequate daylight hours to complete the tasks.

## 4. SITE SPECIFIC ENVIRONMENTAL MANAGEMENT

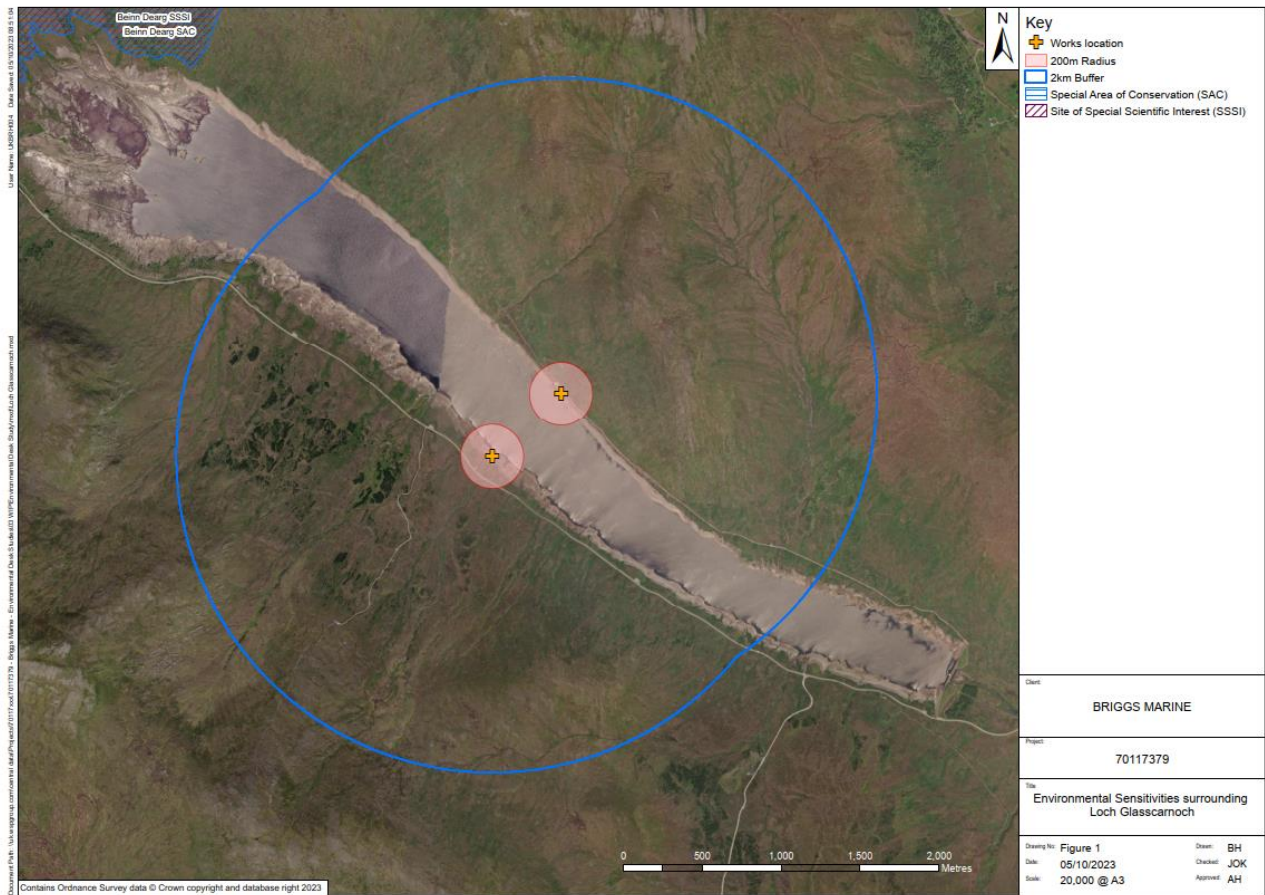
### 4.1. Introduction

Table 7 - Site Specific Designations

Designation	
Special Area of Conservation (SAC)	Areas considered to be important for certain habitats and non-bird species of interest in a European context. One of the main mechanisms by which the EC Habitats and Species Directive 1992 will be implemented.
Special Protection Area (SPA)	Sites designated by the UK Government to protect certain rare or vulnerable species and regularly occurring migratory species of birds.
Site of Special Scientific Interest (SSSI)	<p>Sites of Special Scientific Interest (SSSIs) are those areas of land and water that best represent natural heritage in terms of their:</p> <ul style="list-style-type: none"> <li>• flora – i.e. plants</li> <li>• fauna – i.e. animals</li> <li>• geology – i.e. rocks</li> <li>• geomorphology – i.e. landforms</li> <li>• a mixture of these natural features</li> </ul>
Marine Protected Area (MPA)	Thirty Marine Protected Areas (MPAs) were designated in Scotland's seas on 24 July 2014; 17 of these MPAs fall under the Marine (Scotland) Act 2010 in inshore waters.
Marine Consultation Area (MCA)	Marine Consultation Areas are identified by NatureScot as deserving particular distinction in respect of the quality and sensitivity of the marine environment within them. Their selection encourages coastal communities and management bodies to be aware of marine conservation issues in the area.
RAMSAR	A Ramsar Site is a wetland site designated of international importance under the Ramsar Convention. The Convention on Wetlands, known as the Ramsar Convention, is an intergovernmental environmental treaty established in 1971 by UNESCO, and coming into force in 1975.
Natural Nature Reserves	National Nature Reserves (NNRs) are areas of land set aside for nature. As in other countries, the accolade is given to Scotland's best wildlife sites, to promote their conservation and enjoyment. Most reserves contain nationally or internationally important habitats and species, so the wildlife is managed very carefully. Visitor facilities are designed and managed to ensure that people can enjoy NNRs without harming or disturbing the wildlife that lives there.



### Environmental mapping for Loch Glasscarnoch



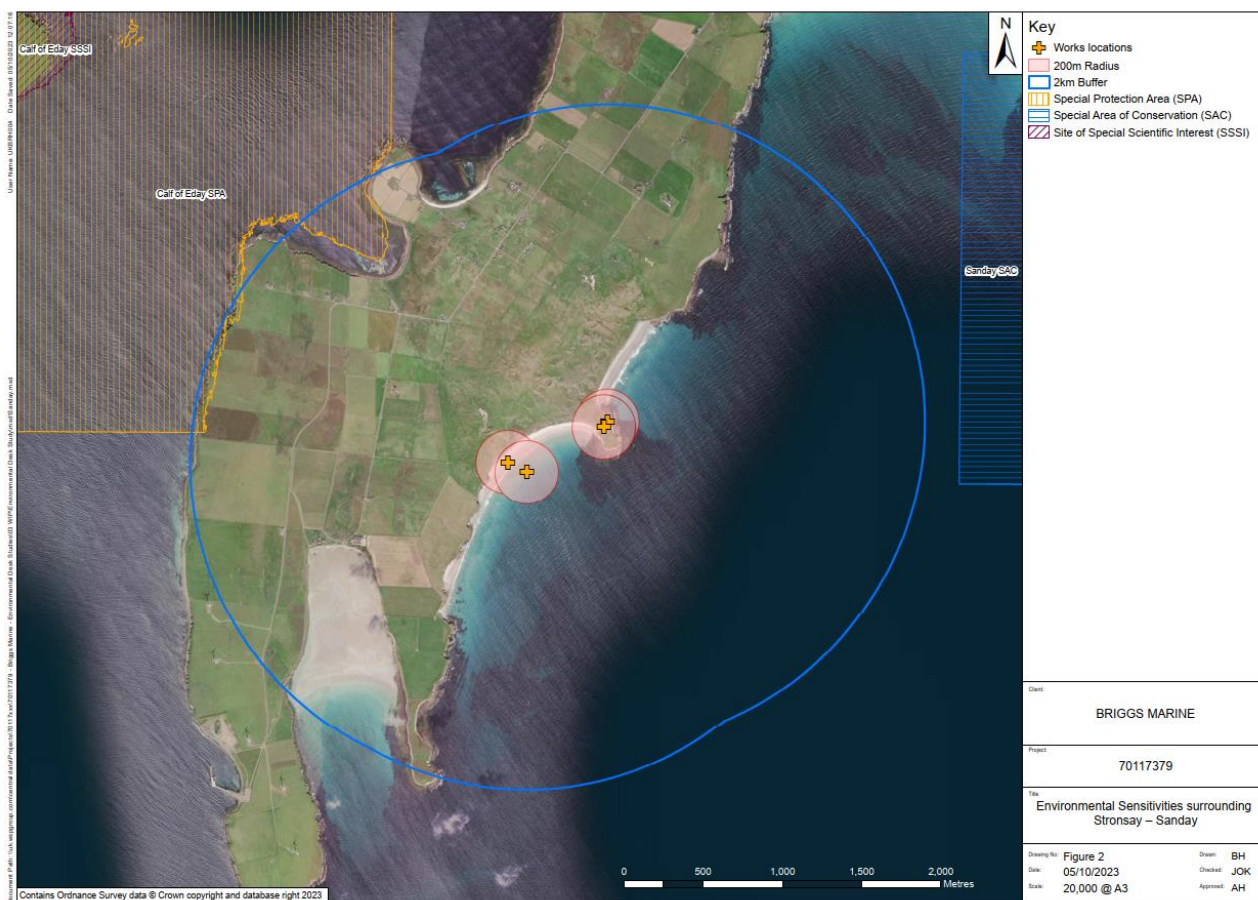
**Figure 2 - Environmental Sensitivities near to work at Loch Glasscarnoch**

No environmental sensitivities present within a 200m radius of the works, or within 2km. Sensitivities shown on the map are the Beinn Dearg SAC and SSSI, which are over 2km away and therefore, due to the scale of the works, no impacts are anticipated.

Otter presence is highly likely in this locale. In general, the greatest threats to otters are traffic accidents or pollution which could impact prey. They are relatively unaffected by human presence.

An ECoW site walkover will be conducted prior to any work commencing at these sites, plus additional surveys for otter to determine the presence of otter in the area and any required mitigation.

### Environmental mapping for Stronsay – Sanday (Sandy landfall)



**Figure 3 - Environmental Sensitivities near to work at Stronsay - Sanday**

No environmental sensitivities present within a 200m radius of the works and there are no seal haul out sites in the nearby vicinity.

The Calf of Eday SPA is 1.4km from the works, within the 2km buffer. The SPA qualifies for the large population of breeding of seabirds it supports, including nationally important populations of great cormorant *Phalacrocorax carbo carbo*, great black-backed gull *Larus marinus*, common guillemot *Uria aalge*, Northern fulmar *Fulmarus glacialis* and black-legged kittiwake *Rissa tridactyla*. Direct impacts to the SPA as a result of shore remediation works are not anticipated, due to the distance from the work. However, there is the potential for this land to be functionally linked to the SPA and therefore disturbance may be caused to the qualifying bird populations.

Otter presence is highly likely in this locale. In general, the greatest threats to otters are traffic accidents or pollution which could impact prey. They are relatively unaffected by human presence.

Works should be timed to avoid the breeding bird season (March to August), where possible. Should this not be possible, breeding bird surveys would be required to determine the presence of breeding birds within the area and any required mitigation. In addition, otter surveys should be undertaken to establish the presence of otter in the vicinity of the works and any subsequent mitigation measures.

An ECoW site walkover will be conducted prior to any work commencing at these sites.

Environmental mapping for Mainland Orkney – Graemsay (Graemsay landfall)

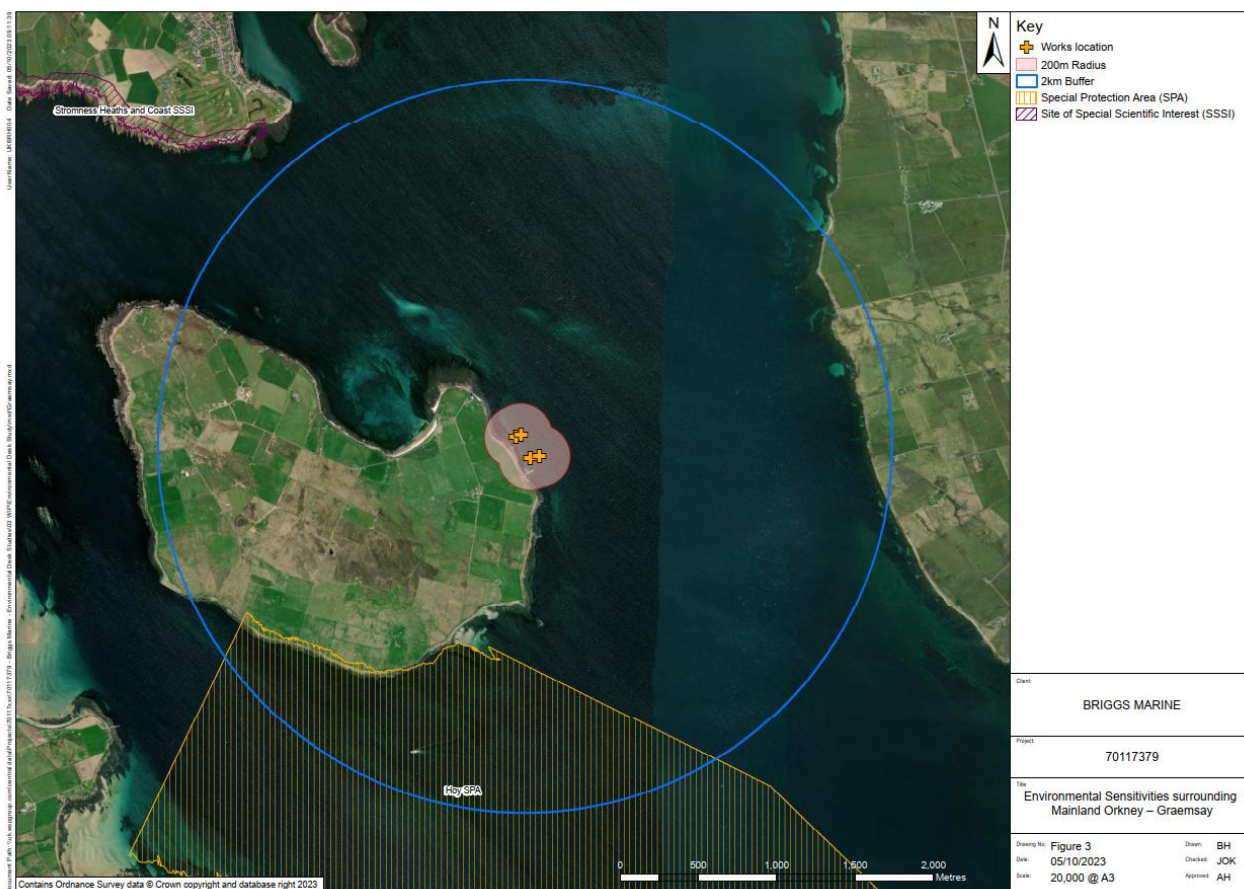


Figure 4 - Environmental Sensitivities near to work at Mainland Orkney – Graemsay

No environmental sensitivities present within a 200m radius of the works and there are no seal haul out sites in the nearby vicinity.

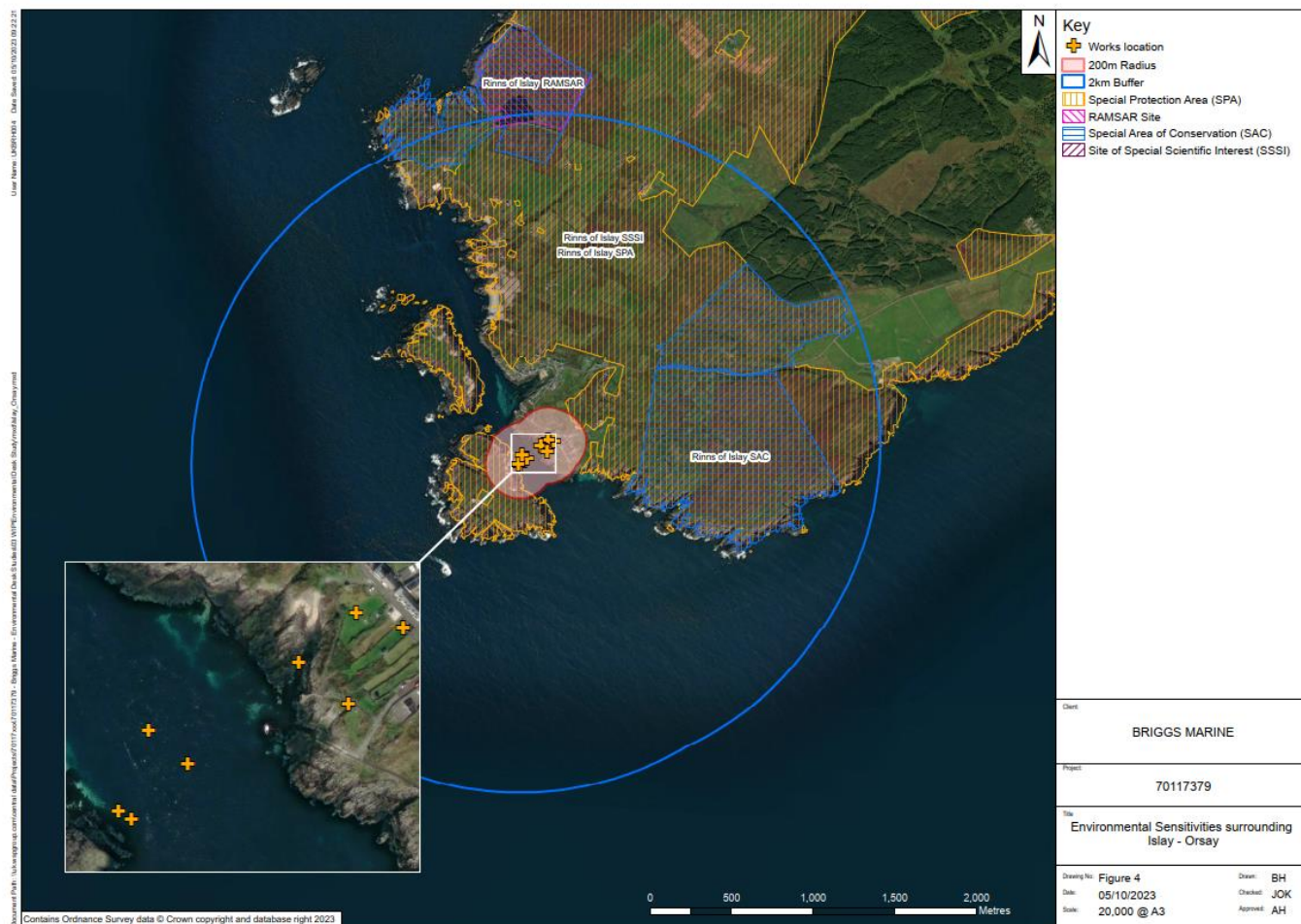
The Hoy SPA is present approximately 1.2km south of the works locations and is designated for supporting breeding populations of <Redacted> and <Redacted>, and migratory species great skua *Stercorarius skua*. It also qualifies as an SPA due to its large population of seabirds, including nationally important populations of Atlantic puffin *Fratercula arctica*, black-legged kittiwake, Arctic skua *Stercorarius parasiticus*, Northern fulmar, great black-backed gull and common guillemot. Direct impacts to the SPA as a result of shore remediation works are not anticipated, due to the distance from the works. However, there is the potential for this land to be functionally linked to the SPA and therefore disturbance may be caused to the qualifying bird populations.

Otter presence is highly likely in this locale. In general, the greatest threats to otters are traffic accidents or pollution which could impact prey. They are relatively unaffected by human presence.

Works should be timed to avoid the breeding bird season (March to August), where possible. Should this not be possible, breeding bird surveys would be required to determine the presence of breeding birds within the area and any required mitigation. In addition, otter surveys should be undertaken to establish the presence of otter in the vicinity of the works and any subsequent mitigation measures.

An ECoW site walkover will be conducted prior to any work commencing at these sites.

### Environmental mapping for Islay – Orsay



**Figure 5 - Environmental Sensitivities near to work at Islay - Orsay**

The Rinns of Islay SPA and SSSI lies within the 200m radius of the works. It is approximately 13m from the works at the closest point, to the south-west. There are no seal haul out sites in the nearby vicinity.

The site is designated as an SPA due to qualifying populations of <Redacted> , <Redacted> . It further qualifies for supporting migratory populations of common scoter *Melanitta nigra*. Thus, the SPA is sensitive during breeding and non-breeding seasons.

The Rinns of Islay is designated as an SSSI due to it’s geological, biological and ornithological interest. It contains internationally important exposures of rocks, which are crucial to developing theories of the formation of the former Caledonian mountain belt. Some areas within the SSSI are of national importance for their geomorphology and are excellent examples of a complex beach-dune-machair assemblage. The site also contains a nationally important habitats such as blanket bog, machair, maritime cliff coastal grasslands and heaths, sand dunes, and scrub woodland. In addition, the site supports internationally important numbers of breeding <Redacted> , breeding <Redacted> and winter migrant populations of white-fronted geese and whooper swan. The breeding bird assemblage is nationally important, in particular the populations of <Redacted>

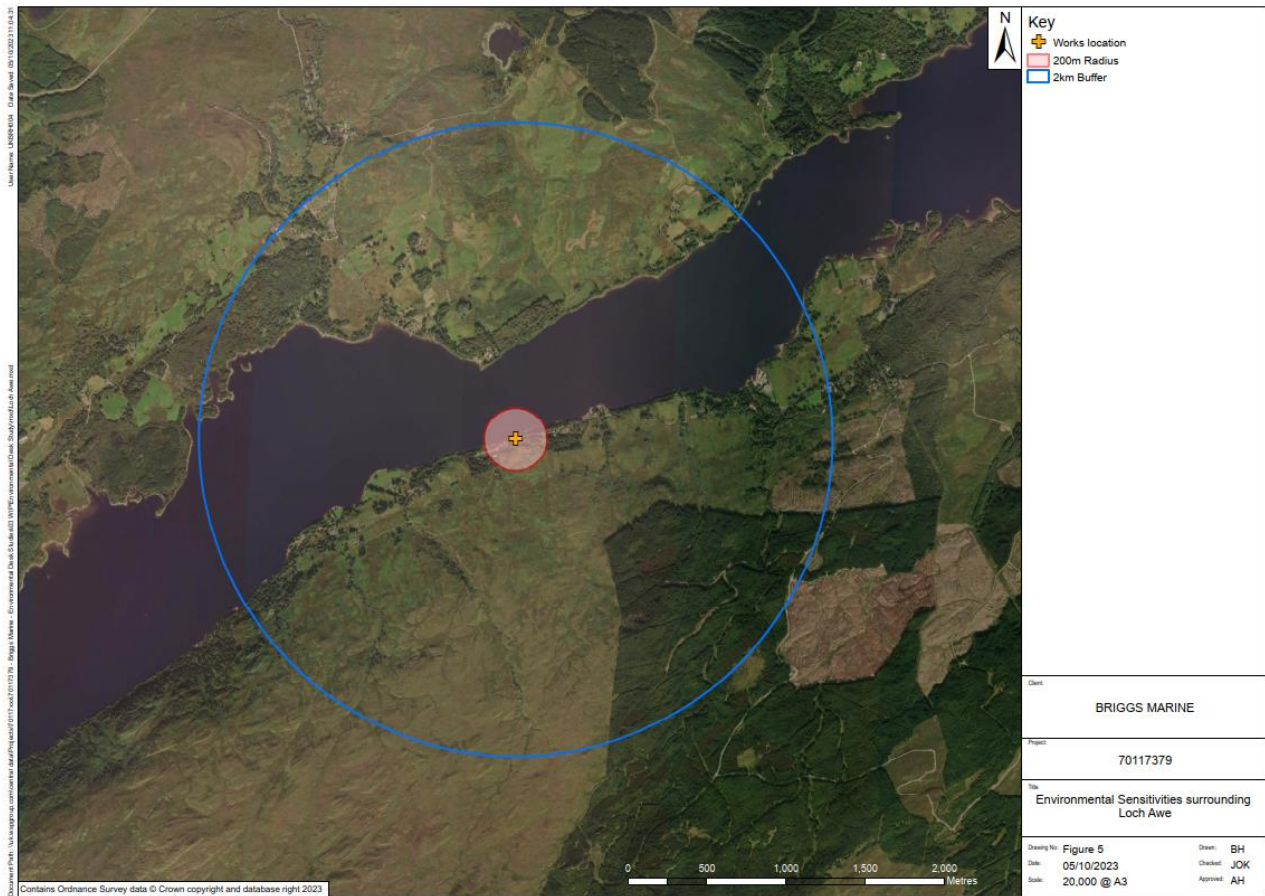
The shoreline remediation works are localised and not within the SPA or SSSI, therefore no impacts to the habitats are anticipated. However, due to the close proximity there is the potential for the works to disturb breeding and wintering birds within these sites. Accordingly, a Habitats Regulations Screening Appraisal will be required before any works can commence, as required the Conservation (Natural Habitats, &c.) Regulations 1994 (the Habitats Regulations).

Otter presence is highly likely in this locale. In general, the greatest threats to otters are traffic accidents or pollution which could impact prey. They are relatively unaffected by human presence.

Works should be timed to avoid the breeding bird season (March to August), where possible. Should this not be possible, breeding bird surveys would be required to determine the presence of breeding birds within the area, in addition to wintering bird surveys to identify the presence of any qualifying bird species. Any mitigation required following these surveys will be recommended. Otter surveys should also be undertaken to establish the presence of otter in the vicinity of the works and any subsequent mitigation measures.

An ECoW site walkover will be conducted prior to any work commencing at these sites.

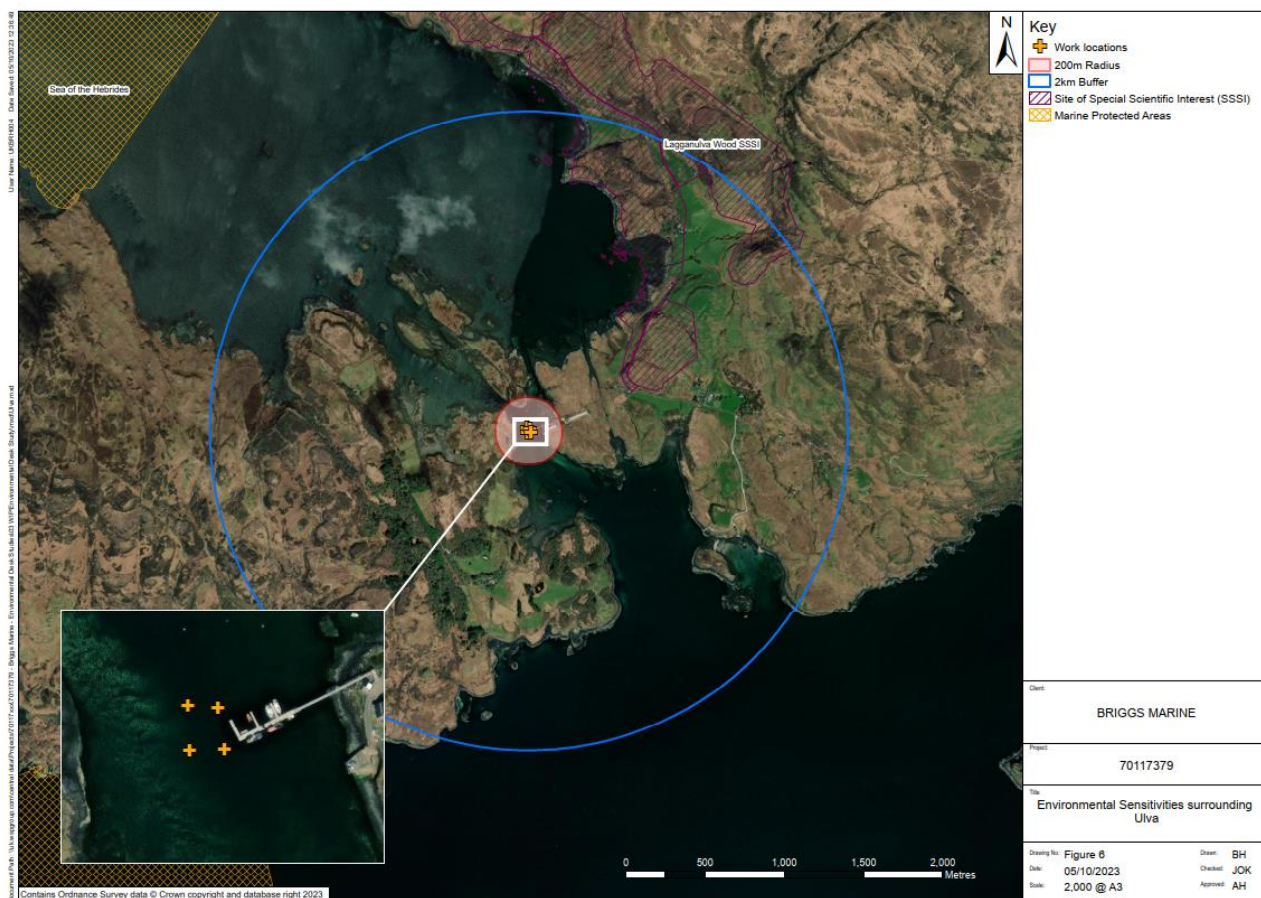
### Environmental mapping for Loch Awe



**Figure 6 - Environmental Sensitivities near to work at Loch Awe**

No environmental sensitivities present within a 2km radius of the works, therefore no impacts on sensitive areas are anticipated. Otter presence is highly likely in this locale. In general, the greatest threats to otters are traffic accidents or pollution which could impact prey. They are relatively unaffected by human presence. An ECoW site walkover will be conducted prior to any work commencing at these sites, plus additional surveys for otter to establish otter presence within the area and determine any required mitigation.

### Environmental mapping for Mull – Ulva (Ulva Landfall)



**Figure 7 - Environmental Sensitivities near to work at Mull - Ulva**

No environmental sensitivities present within a 200m radius of the works. The Lagganulva Wood SSSI lies approximately 670m to the north-east, and the Sea of the Hebrides Marine Protected Area (MPA) is approximately 3km to the north-west. Due to the distance of the MPA from the works locations, no impacts on this site are anticipated.

Lagganulva Wood SSSI is notable for the tertiary igneous and upland oak woodland. The site encompasses laval flows of an unusual type of basalt, volcanic pipes which are rare elsewhere in Scotland, and exposure of volcanic ash overlying lavas. The woodland is one of the best examples of native oak woodland on Mull, with a rich and diverse flora. It is interspersed with heath, marshland and rocky cliffs and supports the hazel glove fungus *Hypocreopsis rhododendri* which is a UKBAP Priority Species and on the Scottish Biodiversity List. As the works are localised and the SSSI is 670m away, no impacts on the SSSI as a result of the shore remediation works are anticipated.

There is a seal haul out site approximately 300m north of the works, as indicated on Figure 8 below (provided by Marine Scotland). This site does not support a breeding colony of seals.

Otter presence is highly likely in this locale. In general, the greatest threats to otters are traffic accidents or pollution which could impact prey. They are relatively unaffected by human presence.

An ECoW site walkover will be conducted prior to any work commencing at these sites, which would include survey of the beach areas to identify any hauled-out seals in the vicinity of the landfall points. Otter surveys should also be undertaken to establish otter presence within the area and determine any required mitigation.

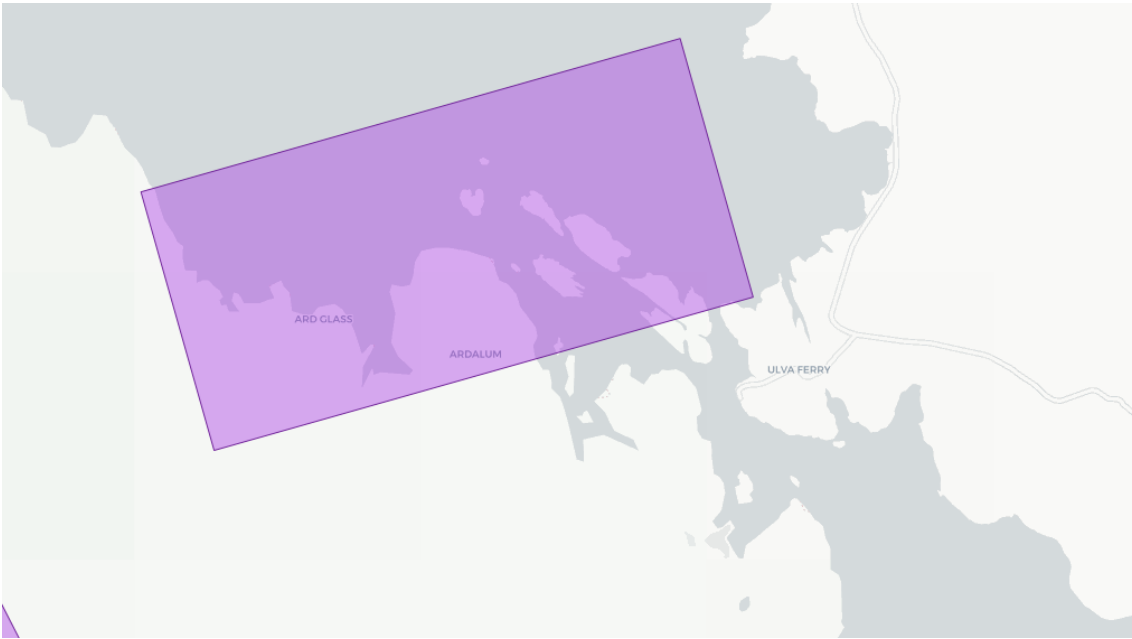
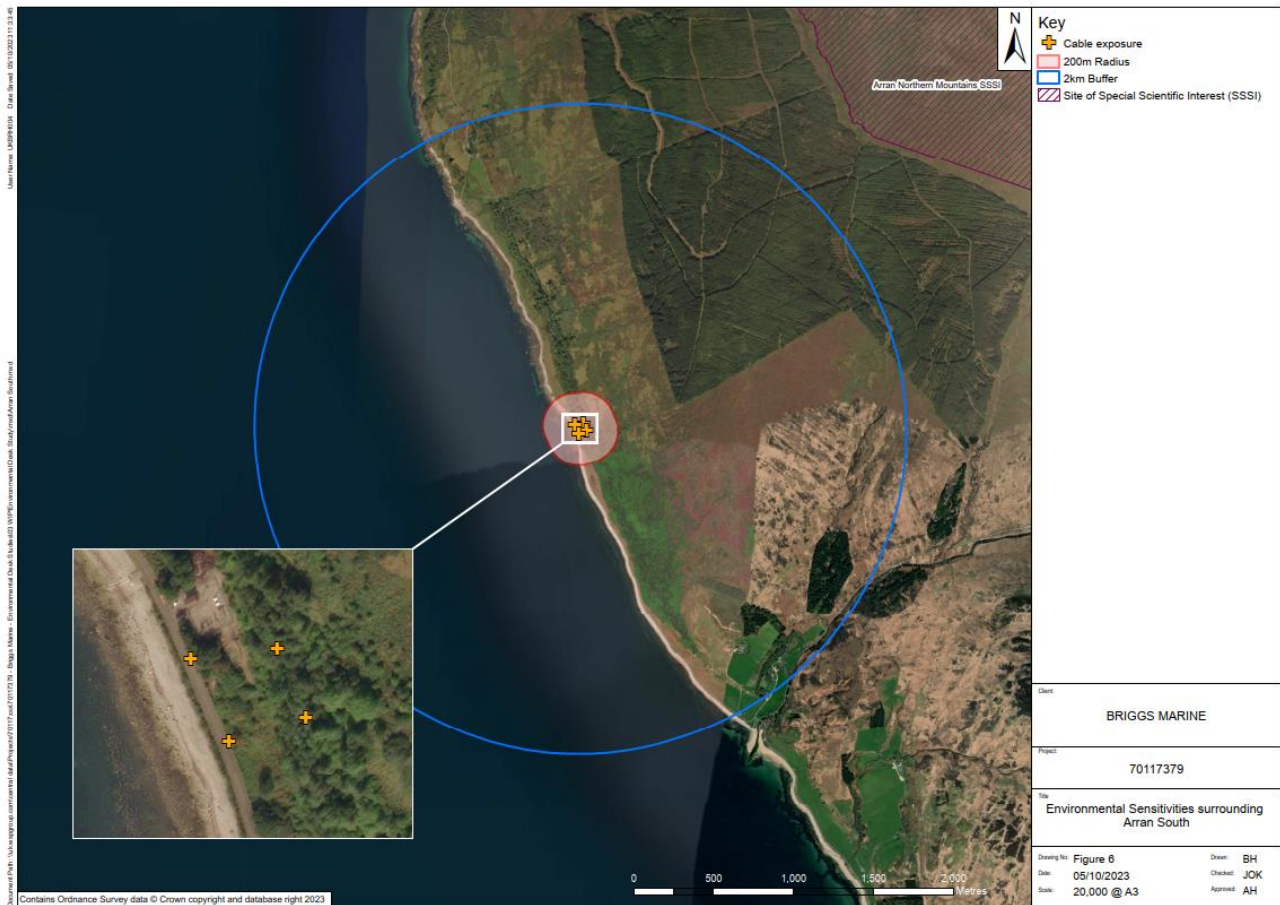


Figure 8 – Seal haul out locations on Mull – Ulva, where purple indicates a haul-out site



### Environmental mapping for Carradale – Arran South (Arran landfall)



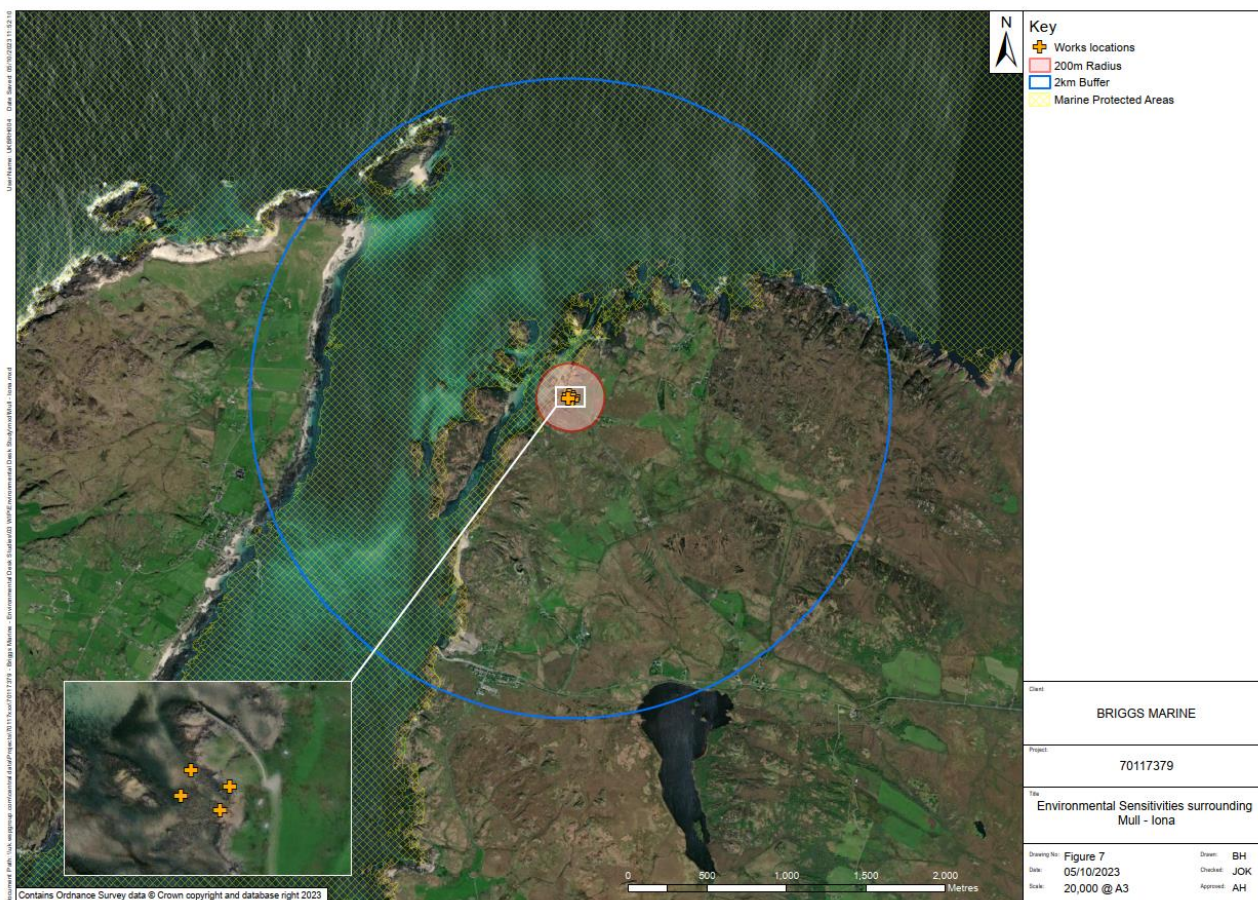
**Figure 9 - Environmental Sensitivities near to work at Carradale – Arran South**

No environmental sensitivities present within a 2km radius of the works, therefore no impacts on sensitive areas are anticipated. The closest seal haul-out site is approximately 7.8km away and so no impacts as a result of the shore remediation works are anticipated.

Otter presence is highly likely in this locale. In general, the greatest threats to otters are traffic accidents or pollution which could impact prey. They are relatively unaffected by human presence.

An ECoW site walkover will be conducted prior to any work commencing at these sites, plus additional surveys for otter to establish otter presence within the area and determine any required mitigation.

### Environmental mapping for Mull – Iona (Mull landfall)



**Figure 10 - Environmental sensitive areas near to Mull - Iona**

At Mull-Iona there is the Sea of Hebrides MPA and the Inner Hebrides and Minches SAC within 100m of the cable’s location at the Mull shore end.

The Sea of Hebrides MPA is designated due to a presence of basking sharks, Minke whales and fronts. Basking sharks migrate to the area during summer to feed at surface from June-October yearly. There are often large groups of basking whales, and they can remain in the area until late October. The fronts provide the ideal habitats required by basking sharks and Minke whales due to its high rates of productivity and nutrients creating the perfect feeding grounds of zooplankton and pelagic fish. Sightings of Minke whales is at its highest during summer months but there is evidence to suggest they are present year-round in lower numbers.

The Inner Hebrides and Minches SAC is designated for the presence of harbour porpoise. There is a high density of harbour porpoise within this area, particularly in the summer months. Harbour porpoise are present year-round and feed on a wide variety of fish. The site offers a variety of substrates from sandy with low amounts of silt to mixed and muddy, therefore supporting a variety of prey species. Accordingly, a Habitats Regulations Screening Appraisal will be required before any works can commence, as required the Conservation (Natural Habitats, &c.) Regulations 1994 (the Habitats Regulations).

According to Marine Scotland there are no seal-haul out sites in the immediate area. The nearest sites are over 5km away as shown in Figure 11 below.

It is considered unlikely that any of the interests above would be impacted by any shoreline remediation works as they would not be expected close to the shore. A marine licence has previously been granted for the remedial works to the Mull – Iona cable, which is active until end of May 2024. BMC will work to the requirements of the marine licence.

An ECoW site walkover will be conducted prior to any work commencing at these sites.



Figure 11 - Seal haul out locations on Mull, where purple indicates a haul-out site and the blue indicates a breeding colony haul out site.

### Harbour Jurisdiction

There is one location which is within a statutory harbour limit, which is Mainland Orkney - Graemsay. Please see figure below.

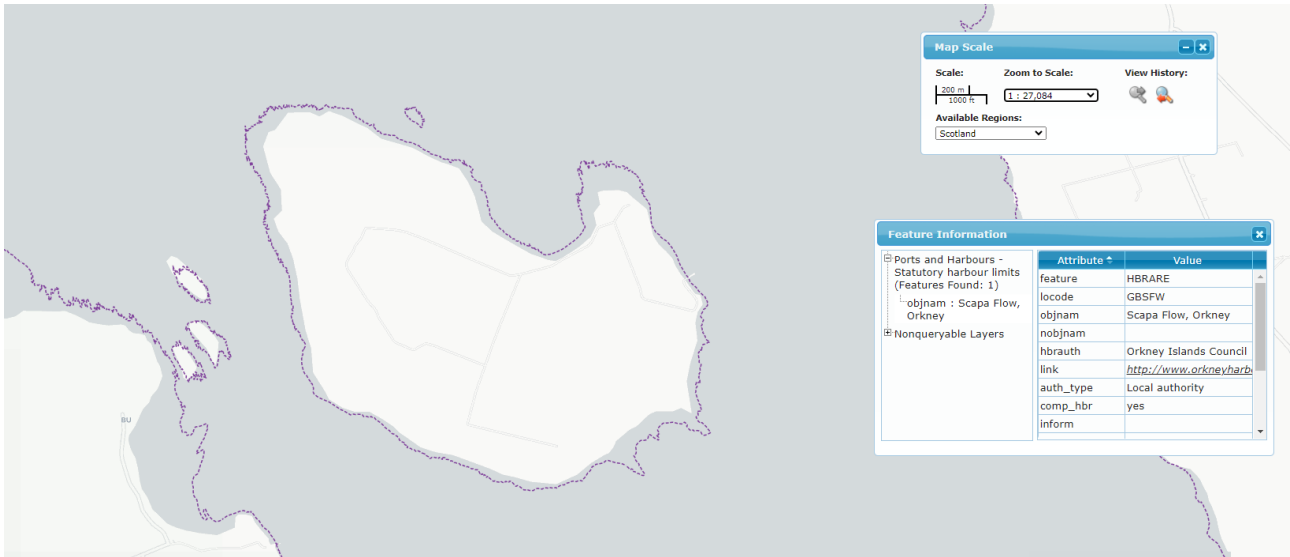


Figure 12 – Statutory harbour limit for Mainland Orkney - Graemsay

### CEMP Requirements

Table 8 - CEMP Requirements

Environmental Feature	CEMP Requirement	When Due	Responsibility	Date completed/ reviewed or checked	Comment / Ongoing actions required
All	An ECoW pre-construction walkover will take place, to ensure that all environmental mitigation will be put in place throughout the construction period.	Pre-construction Construction	ECoW / BMC		
Terrestrial Ecology	All site personnel will attend a Tool Box Talk, as part of their site induction. The toolbox talk will include: - an outline of roles and responsibilities relating to any marine / terrestrial ecology within or adjacent to site; - a description of any key ecological features present, including photographs to help contractors recognise these; - any specific mitigation measures that need to be implemented on site, including any required protection zones around any discovered sensitive habitat; and - the procedure to follow if unexpected wildlife is encountered during the works.	Pre-Construction	ECoW BMC		
Terrestrial Ecology	Understand and implement all guidance and contained in the CB0262 – General Environmental Management Plan (GEMP), CB0262-3003 – Environmental Constraints (ongoing) RA for standard best practice methods.	Pre-Post Construction Construction	BMC ECoW SSEN		
Otters	A pre-construction ECoW site walkover will be undertaken a minimum of 10 weeks prior to planned works. If required, this CEMP will be updated to reflect any results from the pre-construction survey. If any otter licences are required, this will be applied for minimum 10 weeks before and planned works.	Construction	ECoW BMC		

<p><b>Seals</b></p>	<p>There is a potential for both harbour seal and grey seal to be present in coastal areas in the vicinity of the works. No known seal haul outs are within the proposed working corridors.</p> <p>A pre-construction ECoW walkover will be undertaken and daily checks of the beach areas for hauled out seals will be performed in the vicinity of the landfall points (prior to the commencement of works that day).</p> <p>BMC personnel will be aware of the Scottish Government advice and responsible behaviour around seals: <a href="http://www.gov.scot/Resource/0045/00452869.pdf">http://www.gov.scot/Resource/0045/00452869.pdf</a></p> <p>Pre-construction checks will be required if works are delayed and occur during seal pupping seasons (June/July for harbour seal and September-December for grey seal).</p>	<p>Pre-Construction / Construction</p>	<p>BMC</p>		
<p><b>Birds</b></p>	<p>Most proposed working areas are not listed as a Special Protection Area (SPA) with the exception of Stronsay – Sanday and Orkney – Graemsay. Breeding bird surveys will be required in these areas to determine the presence of breeding birds within the area and any required mitigation.</p> <p>An ECoW site survey will also be achieved a minimum of 10 weeks before work commences to ensure that there will be no presence of breeding birds.</p> <p>If required, all mitigation will be adhered to, according to CB0262 – GEMP, Appendix A Special Protected Plan – Breeding Birds.</p>	<p>Pre-Construction</p>	<p>ECoW BMC</p>		
<p><b>Habitats</b></p>	<p>Desktop studies have shown a Habitats Regulations Assessment (HRA) will be required (10 weeks before work commences) in some areas listed.</p>	<p>Pre-Construction</p>	<p>ECoW BMC</p>		
<p><b>Cultural heritage</b></p>	<p>Historic Environment Records do not indicate any archaeological features in the specified work areas; however it is worth noting that any unexpected encounters of archaeological remains along the pre-existing cable routes, should be reported immediately to BMC PM.</p>	<p>Pre-Construction</p>	<p>ECoW BMC</p>		

## 5. WATER QUALITY PROTECTION AND POLLUTION

### 5.1. Prevention

#### 5.1.1. Introduction

The following sections describe measures to protect water quality and prevent pollution.

#### 5.1.2. Drainage Management Strategy

The water environment could be potentially polluted during maintenance works, by virtue of:

- spillage of oils or other pollutants from machinery and vehicles.

#### 5.1.3. Pollution Prevention

The pollution prevention of groundwater is to be prevented by adherence to the SEPA Guidance Pollution Prevention (GPP) series, (but also taking cognisance of the former Pollution Prevention Guideline (PPG) series). Please also refer to CB192-GEMP, section 1 - Watercourse Crossings and section 2– 'Working In or Near Watercourses' for best practice methods.

Training will be provided to on-site personnel via toolbox talks highlighting the risks of the polluting water environments during construction and highlighting sensitive locations.

Water quality monitoring by means of visual inspection will be undertaken, as a minimum, on a daily basis (and more frequently during periods of poor weather) of any areas considered at high risk during work activities. Temporary works areas will be sited at least 50m from the water environment including waterbodies where possible to reduce the potential for transmission of sediment laden run-off or accidental spillages.

#### 5.1.4. Watercourse Crossing

Site investigations were carried out and it was noted that there were no watercourses that would need to be crossed during operations. If at any time access to site needs to be altered and the need to cross a watercourse arises, this will be undertaken in line with SEPA's General Binding Rule 9 (1), specifically the following requirement:

Following the operation of the machinery, any damage caused by the operation to the bed and banks of the surface water must be repaired, including re-establishing vegetation on any areas of bare earth on the banks resulting from the operation, either by covering the area with grass turfs or lining them with a biodegradable geotextile and seeding. [https://www.sepa.org.uk/media/34761/car\\_a\\_practical\\_guide.pdf](https://www.sepa.org.uk/media/34761/car_a_practical_guide.pdf).

Please also refer to CB0262–1004 GEMP, section 2 - working in or near surface waters.

#### 5.1.5. Water / Ground Contamination (from Spillage)

Potential pollution of the water environment and groundwater is to be prevented during works by adhering to the following measures:

- All fuel storage containers are to be labelled showing contents and maximum capacity.
- Plant nappies are to be used during refuelling operations.
- All works within 30 m of a water environment must be carried out following SEPA GPP guidance and following a site specific environmental briefing.
- Machine operators are to carry out daily inspections of plant, including hydraulic lines. This will be recorded on a mobile plant and lifting equipment inspection check sheet.
- Spill kits are to be readily available at all sites and with all items of mobile / static plant.
- All sites are to be kept tidy and clean. Materials and plant will be securely stored to avoid trespass and vandalism.
- All oil storage tanks, drums etc. Must be placed on level ground with 110% bund containment and inspected daily (where applicable).
- During maintenance work on plant, appropriate containers and drip trays are to be used to mitigate unavoidable spillage. Similar measures will also be used when re-fuelling.
- Any contamination of ground will be removed immediately, in such a manner that does not have the potential to cause further pollution to the surrounding environment. Contaminated spoil is to be treated as Hazardous (Special) Waste and will be appropriately disposed of by a licensed waste contractor.

All welfare facilities are to have an appropriate system for the treatment or removal of foul waste and provision made for the regular removal of waste products. Please also refer to CB0262-1004-GEMP, section 2 - working in or near surface waters

### **5.1.6. Fuel storage**

In the first instance please see CB0262-GEMP, Section 2 - working in or near surface waters, Section 5 – Contaminated Land and Section 7 – ‘Oil Storage and Refuelling’.

No refuelling is to take place within 30 m of the water environment limiting any potential spillages from polluting the water environment.

Fuel storage will be at the main compound situated on impermeable ground.

Refuelling of plant and machinery will only take place within a defined area within site compounds. Clearly defined areas for storage of oil and refuelling will be identified as part of the compound establishment process.

Spill kits will be located and maintained at all oil storage and refuelling locations and in all site vehicles and plant.

### **5.1.7. Pollution Control**

The fundamental measure of pollution control is to seek to stop the action which is causing pollution immediately, CB0262 – GEMP in sections, 2 - working in or near surface waters, 5 – Contaminated Land and 7 – ‘Oil Storage and Refuelling’ but additionally:

- take immediate remedial action - block spill; place booms and absorbent materials to help soak up spill;
- ensure all plant is double bunded/double skinned/ appropriate drip trays in place to contain leakages; and
- have control measures in place and have fully stocked spill kits easily accessible.

### **5.1.8. COSHH Assessment**

All substances identified as hazardous will be Control of Substances Hazardous to Health (COSHH) assessed and appropriate COSHH sheets for each individual material type retained on site and accessible to all works personnel. The use of non-assessed substances is prohibited. All operatives are required to comply with the controls specified within COSHH assessments. All COSHH items will be stored in a secure, ventilated store, separate from non COSHH items. All COSHH waste items will be discarded within a defined COSHH waste storage receptacle until being removed from site by a suitably licenced contractor (suitable for the removal of hazardous wastes).

COSHH assessments cover all range of materials and are not limited to construction associated items and will additionally be provided for any domestic cleaning materials used on site (e.g. bleach).

### **5.1.9. Welfare Facility**

Welfare facilities on site will be sufficient to adequately accommodate all site personnel.

## **5.2. Air Quality**

### **5.2.1. General Principals**

Emissions to the atmosphere in terms of gaseous and particulate pollutants from vehicles and plant used on the site, will be controlled and limited as far as reasonably practicable.

### **5.2.2. Environmental Control Measures**

The following control measures will be implemented to minimise the risks to air quality on and off site.

- vehicles, plant and equipment will be regularly serviced and inspected and any defects e.g. leaks or dark smoke, reported and removed from use or rectified immediately;
- records of plant and equipment maintenance/inspections will be available on site for inspection;
- engines will be turned off when not in use.



## 5.3 WORKING IN OR NEAR SURFACE WATERS

Construction activities in or near water have the potential to cause serious pollution or impact on the bed and banks of a watercourse and on the quality and quantity of the water. Most pollution incidents are avoidable. With careful planning the risk of site work causing pollution can be reduced. Many measures needed to prevent pollution are not expensive, especially if they are included at the planning stage of any activity. Major causes of environmental harm associated with working in or near watercourses include:

- silt e.g. disturbance of river bed or bank, dewatering and pumping of excavations, run-off from exposed ground, plant washing, roads and river crossings;
- cement and concrete – which is very alkaline and corrosive and can cause serious pollution;
- chemicals and solvents – oil storage, refuelling, trade materials etc;
- bridge cleaning debris – e.g. dust, debris & wastewater;
- herbicides – e.g. aerial application;
- waste materials (including special waste) e.g. oily wastes, spent acids and solvents.

Most activities with the potential for affecting watercourses or groundwater will require an authorisation under The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (CAR).

BMC is required to comply with the following:

### 5.3.1. General

- Identify all activities that will be undertaken in or near watercourses (including all identifiable drainage paths);
- Plan all works in accordance with best practice;
- Avoid works within 10m of a watercourse unless no other practical options exist, and leave a vegetated buffer strip;
- Where works are undertaken within 10m of any watercourse or drain, ensure specific pollution prevention controls are in place;
- Communicate risks associated with working in or near watercourses to all personnel and include control measures in the site specific construction method statements;
- Seek to avoid or minimise watercourse engineering works wherever possible;
- Ensure all necessary consents under the Controlled Activities Regulations (CAR) are in place;
- Ask the environmental project manager for advice in planning works in and near watercourses;
- Vehicles should not work within the water unless no other reasonable options exist;
- All construction machinery operating in-stream should be mechanically sound to avoid leaks of oils, hydraulic fluid, etc;
- Machinery should be steam cleaned and checked prior to commencement of in-stream works;
- All reasonable steps shall be taken to prevent the transport of sediments or other matter disturbed by the works;
- Keep site tidy and do not store materials too close to watercourses or surface water features;
- Check if there are any timing restrictions to works because of protected species (e.g. spawning salmonids, otter, water vole, etc.) or landowner commitments;
- Ensure all required pre-construction surveys have been completed before starting works (these will include, where appropriate, FWPM, otter, water vole, etc.);
- Any temporary dams used should be designed to accommodate periods of high watercourse discharge and dried out sections of bed should be checked for stranded fish;
  
- Where pumps are also used, back up pumps should be available. Pumps should also be fitted with screens to prevent fish mortalities and ingress of debris, and the outfall to pumps be designed to prevent erosion of the receiving waters (i.e. by dissipating the flow);
- Care should also be taken to avoid pollution of watercourses with sediment and to ensure that any de-silting works would not interfere with the bank sides;
- Vegetation removal should be minimised wherever possible;
- Where stock has access to the works fencing may be necessary in order to allow the regeneration of native riparian and aquatic marginal vegetation;
- Ensure construction works minimise disturbance to the current run-off regimes.



## **6. NOISE AND VIBRATION**

### **6.1. General Principals**

There is limited potential for noise impacts. Noise from maintenance works will be minimised using Best Practicable Means, as defined under Section 72, Part III of the Control of Pollution Act (CoPA) 1974. BS 5228 provides guidance on controlling noise from work sites in Clause 8, which will be followed where appropriate and practicable.

Measures will be adopted on both Sites to reduce noise of equipment and the work including those listed below. Please refer to CB0262 – 1004 – GEMP, section 14 noise and vibration.

## **7. EMERGENCY PROCEDURES**

### **7.1. Introduction**

Please refer to CB0262 – 1004 – GEMP, section 14, for procedures to be followed in the event of an environmental incident or pollution event.

### **7.2. Incident Reporting**

In the event of a pollution event or environmental incident on site an Incident Report Form will be submitted to the SSEN Project Manager and SHE representative as specified in Table 2.1.

In the event pollution enters a surface water drainage channel SEPA must be informed. Should pollution enter surface water or foul water drainage channels Scottish Water and local council's must also be informed. Should an environmental incident or pollution event take place at the shore end location of the works that discharges to the littoral and tidal area, or to sea, this will be reported to SSEN immediately and SEPA subsequently contacted for direction.

## **8. BREEDING BIRD PROTECTION**

Construction works have the potential to negatively impact on breeding birds as a result of either direct destruction of nests or disturbance which may result in breeding failure. In addition, some particularly sensitive species are liable to disturbance outwith the breeding season.

In the first instance please refer to CB0262-GEMP, Appendix A Species Protection Plan. Whereby it outlines the procedures that must be followed where there is a potential for breeding birds to be affected. It explains the responsibilities of BMC and its Contractors, the legislative protection for birds, and the measures required to minimise impacts on birds and thereby the risk of criminal offences being committed.

It is BMC's responsibility to comply with all the requirements of this plan and it is both BMC's and SSEN's responsibility to monitor compliance with the plan.

## **9. OTTER PROTECTION**

Otter is a European Protected Species and is afforded a high level of protection in Scotland.

After an ECoW pre-construction has been achieved, any Otter mitigation will be contained within CB0262-3003 Environmental RA and this live CMEP will be updated.

Please also refer to CB0262-GEMP, Appendix B, for general guidance for the protection of otters and their shelters during construction works. The Plan contains two parts and details the procedures that must be followed where there is potential for otter to be present (Part 1), and where a Project Licence for otter has been issued by NatureScot to cover the project (Part 2):

## **10. REINSTATEMENT**

BMC shall reinstate all working areas as a result of the works or access across land to the reasonable satisfaction of the landowner/occupier and SSEN

## 11. BAD WEATHER

It is important to consider the implications of poor weather conditions and associated environmental risks. Bad weather, particularly heavy rain, can cause significant environmental impacts during construction (for example, on sensitive habitats and increased risk of sediment laden run-off into surface waters).

BMC is required to comply with the following:

- Identify an action plan before construction starts with a protocol of measures to implement in times of bad weather. This should include heavy rain, high winds, snow and frost;
- The weather forecast should be checked on a daily basis and thought should be given to possible sudden changes;
- Ground conditions should be checked regularly and assessment made as to whether they are suitable for the proposed site activities;
- Check whether plant is causing unacceptably high damage on site because of poor ground conditions (involve the ECOW)
- Consider whether plant could be at risk if used in areas which are too wet;
- Plan for high run-off in advance and Identify protection measures (silt traps, straw bales and booms etc);
- Check for any materials stored close to watercourses during construction activities which could be washed into the water in times of storm;
- During times of excessive rainfall and ground saturation, stripping and reinstatement works should not be undertaken.

## 12. BIOSECURITY

When working/crossing farmland or working near livestock, all personnel to ensure that boots / wheels of vehicles have been brushed with the bio security product (DEFRA approved disinfectant FAM-30) that will be available to all personnel on each site.

## APPENDIX 1 – Correspondence and commitments register

From	Comment	Addressed?