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# Isles of Scilly Sea Defences – Lower Town Beach

# Habitat Regulations Assessment (HRA)

February 2023

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# **Revision History**

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# Contract

This report describes work commissioned by The Council of the Isles of Scilly, JBA Consulting carried out this work.

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# Purpose

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# Contents

1	Introduction	1
1.1	Background	1
1.2	Legislative Context	1
2	Habitats Regulations Assessment Methods	1 2 2 3
2.1	Overview	2
2.2	Guidance	3
2.3	Consultation	3
2.4	Assumptions and Limitations	3
3	Description of the Project	4
3.1	Site Location	4
3.2	Proposed Works	4
4	European Sites	6
4.1	Project Area of Influence and European Sites	6
4.2	Isles of Scilly Complex Special Area of Conservation (SAC)	7
4.2.1	Qualifying Features	7
4.2.2	Conservation Objectives	8
4.3	Isles of Scilly Special Protection Area (SPA)	8
4.3.1	Qualifying Features	8
4.3.2	Conservation Objectives	8
4.4	Isles of Scilly Ramsar	9
4.4.1	Qualifying Features	9
4.4.2	Conservation Objectives	9
5	Screening Assessment	10
5.1	Introduction	10
5.2	Potential Hazards to European Sites	10
5.3	Potential in-combination effects	10
5.4	Assessment of Likely Significant Effects	12
5.5	Screening Statement Conclusion	20
6	Appropriate Assessment	21
6.1	Introduction	21
6.2	European Sites	21
6.2.1	Pollution Prevention Measures	21
6.3	Appropriate Assessment of Project Impacts and Mitigation	22
6.4	Implementation of Mitigation	29
7	Appropriate Assessment Conclusions	29

# **List of Figures**

Figure 3-1 Location of proposed scheme	4
Figure 4-1 Designated Sites Overview	6
Figure 4-2 Designated Sites Close Up	7

# **List of Tables**

Table 5-2: Assessment of Likely Significant Effects1Table 5-3: Summary of screening conclusions for the project showing all screened in hazards and European Sites2Table 6-1: European sites screened into this assessment2	Table 2-1: The HRA process	2
Table 5-3: Summary of screening conclusions for the project showing all screened in hazards and European Sites2Table 6-1: European sites screened into this assessment2	Table 5-1: Potential Hazards to Relevant Qualifying Features	11
hazards and European Sites2Table 6-1: European sites screened into this assessment2	Table 5-2: Assessment of Likely Significant Effects	12
Table 6-1: European sites screened into this assessment2	Table 5-3: Summary of screening conclusions for the project showing all screened in	
•	hazards and European Sites	20
Table 6-2: Appropriate Assessment of Hazards and Mitigation2	Table 6-1: European sites screened into this assessment	21
	Table 6-2: Appropriate Assessment of Hazards and Mitigation	23

# **Abbreviations**

EC	European Commission
ECJ	European Court of Justice
EMP	Environmental Management Plan
HRA	Habitats Regulations Assessment
INNS	Invasive non-native species
OSGR	Ordnance Survey Grid Reference
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
bb	Abbreviation

# 1 Introduction

#### 1.1 Background

The Council of the Isles of Scilly is proposing to construct new coastal and flood protection works at nine sites across islands off the Isles of Scilly. Five of these sites, Great Popplestone, Great Porth North of Great Carn, Green Bay, Stinking Porth, and Kitchen Porth are located on the island of Bryher. Three of these sites, Porth Killier, Periglis Beach and Porth Coose are located on the island of St Agnes. The ninth site, Lower Town Beach, is located on the island of St Martin's.

The Isles of Scilly are generally low lying and therefore many areas are vulnerable to flooding. The flood risk is likely to increase in the future as a result of the effects of climate change. The risks to the islands have been highlighted by storms in 1989, 2004 and 2014.

The aim of this project is to protect homes and businesses across the islands of Bryher, St Agnes and St Martin's, as well as key infrastructure including the islands' emergency services and road network.

The whole of the Isles of Scilly is an Area of Outstanding Natural Beauty (AoNB), a Conservation Area and a Heritage Coast. Areas of the islands are also designated as Special Areas of Conservation (SACs) under the EU Habitats Directive, Special Protection Areas (SPAs) through the EC Birds Directive, Ramsar Sites through the 1971 UNESCO Ramsar Convention, a Marine Conservation Zone (MCZ) and 26 Sites of Special Scientific Interest (SSSIs).

JBA Consulting have been commissioned to provide a report in support of a Habitats Regulations Assessment (HRA) for each of the nine sites within the proposed scheme. This HRA covers the St Martin's site Lower Town Beach only but where appropriate, cumulative impacts from the other schemes will be considered.

#### **1.2 Legislative Context**

Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, known as the 'Habitats Directive' was adopted in 1992. The Directive promotes the maintenance of biodiversity by requiring Member States to take measures to maintain or restore certain natural habitats and wild species at a favourable conservation status, introducing robust protection for those habitats and species of European importance.

The Directive establishes the requirement for a European ecological network of protected sites by designating SACs for habitats listed on Annex I and for species listed on Annex II. These measures are also to be applied to SPAs classified under Article 4 of the Birds Directive. Together SACs and SPAs make up the Natura 2000 network.

The Directive is transposed into law in England and Wales through the Conservation of Habitats and Species Regulations 2017 (as amended). The Regulations require that an HRA is undertaken by a Competent Authority prior to the issue of any consent to consider whether a proposed project is likely to have a significant effect on a Natura 2000 site. Government guidance also requires that Ramsar sites (which support internationally important wetland habitats and are listed under the Convention on Wetlands of International Importance [Ramsar Convention]) are included within an HRA. Together, SACs, SPAs and Ramsar sites are known as 'European sites').

For all plans and projects, which are not wholly directly connected with, or necessary to, the conservation management of the site's qualifying features, a formal screening for any Likely Significant Effects (either alone or in combination with other plans or projects) on a European site(s) is required. The screening assessment is based on available ecological information on the designated site(s), other plans, projects, and policies relevant to the area and details of the proposed works.



Following the recent European Court of Justice (ECJ) judgement in the case of "People over Wind & Sweetman" (Case C-323/17), measures that are necessary to avoid or reduce impacts on the European site, even when considered standard environmental best-practice, cannot be considered at the screening stage.

If the screening assessment concludes that the project may have a significant adverse effect on the conservation objectives of the site(s), or that such an effect cannot be ruled out (adopting a precautionary approach) an Appropriate Assessment must be carried out. An Appropriate Assessment involves an assessment of the potential effects of a project on the conservation objectives of the site(s). If significant adverse effects are identified, mitigation or avoidance measures can be applied.

If it cannot be concluded that the works will not adversely impact upon the integrity of the site(s), the project will not be able to proceed without further conditions and/or assessment.

## 2 Habitats Regulations Assessment Methods

#### 2.1 Overview

Habitat Regulations Assessment follows a four-stage process as outlined in the Habitats Regulations Assessment Handbook (DTA, 2019) and summarised in Table 2-1 below.

This report provides evidence to support Stage 1 and Stage 2 of the HRA process, to provide the Competent Authority(s) with information to make their assessment.

#### Table 2-1: The HRA process

HRA stage	Description
Stage 1: Screening	This process identifies the likely significant effects upon a European site of a project or plan, either alone or in-combination with other projects or plans and determines whether these impacts are likely to be significant. Following the recent ECJ judgement in the case of "people over wind" (Case C-323/17). Measures that are necessary to avoid or reduce impacts on the European site, even when considered standard environmental best-practice, can only be at Stage 2. If no likely significant effect is determined, the project or plan can proceed. If a likely significant effect is identified, stage 2 is commenced.
Stage 2: Appropriate Assessment	<ul> <li>Stage 2 is subsequent to the identification of likely significant effects upon a European site in stage 1. This assessment determines whether a project or plan would have an adverse impact on the integrity of a European site, either alone or in-combination with other projects or plans.</li> <li>This assessment is confined to the effects on the internationally important habitats and species for which the site is designated (i.e. the interest features of the site).</li> <li>Appropriate Assessments, in line with ECJ Case C-461/17 Holohan v An Bord Pleanála, must also consider impacts upon habitats and species within or outside of a site boundary if they support a qualifying feature and could impact upon the conservation objectives of the site.</li> <li>If no adverse impact is determined, the project or plan can proceed. If an adverse impact is identified, stage 3 is commenced.</li> </ul>
Stage 3: Assessment where no alternatives	Where a plan or project has been found to have adverse impacts on the integrity of a European site, potential avoidance/mitigation measures or alternative options should be identified. If suitable avoidance/mitigation or alternative options are identified,

HRA stage	Description
and adverse impacts remain	that result in there being no adverse impacts from the project or plan on European sites, the project or plan can proceed. If no suitable avoidance/mitigation or alternative options are identified, as a rule the project or plan should not proceed. However, in exceptional circumstances, if there is an 'imperative reason of overriding public interest' for the implementation of the project or plan, consideration can be given to proceeding in the absence of alternative solutions. In these cases, compensatory measures will have to be put in place to offset any negative impacts.
Stage 4: Compensatory measures	Stage 4 comprises an assessment of the compensatory measures where, in light of an assessment of imperative reasons of overriding public interest, it is deemed that the project should proceed.

#### 2.2 Guidance

The methodology used for this assessment is based on guidance in The Habitats Regulations Assessment Handbook (DTA, 2019). In addition, the following guidance documents were also consulted:

- European Commission Notice: Managing Natura 2000 sites. The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018)
- UK Government Guidance on the Use of Habitats Regulations Assessment (UK Government, 2019).

#### 2.3 Consultation

This report will be submitted to The Council of the Isles of Scilly for comment. HRA is an iterative process and further consultations may be required.

#### 2.4 Assumptions and Limitations

Information on the works and conditions on site are based on current knowledge at the time of writing.

Cumulative impacts are based on published documentation. If other projects with the potential for cumulative impacts are identified, it may be necessary to re-assess this project.

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# **3 Description of the Project**

#### 3.1 Site Location

Lower Town Beach is located on the northwest boarder of St Martin's Island on the central north margins of the Isles of Scilly archipelago. The site extends from the northeast corner of Lower Town to the beach and footpaths on the west, the approximate central OS Grid Reference is SV 91508 16145. This is the only island with sand dunes on its southern coast and they are under possible threat from climate change. However, they have been showing positive signs of self-repair with increasing successional grass coverage, following the 2014 storms that hit the isles of Scilly. There are signs of erosion due to human activity from access to the beach and from cabling that has become exposed at the Lower Town Beach. The location of the proposed work can be seen in Figure 3-1.



#### Figure 3-1 Location of proposed scheme

#### 3.2 Proposed Works

The main objective of the proposed works at Lower Town Beach are to prevent further erosion caused by human activity which may erode and weaken dune defences.

The proposed works include:

 Fencing off the most sensitive area of dunes at the rear of the beach, including the area to the east of the access track where cabling has become exposed to help recovery by limiting access to this area and encouraging accretion of sand at the foot of the dunes.



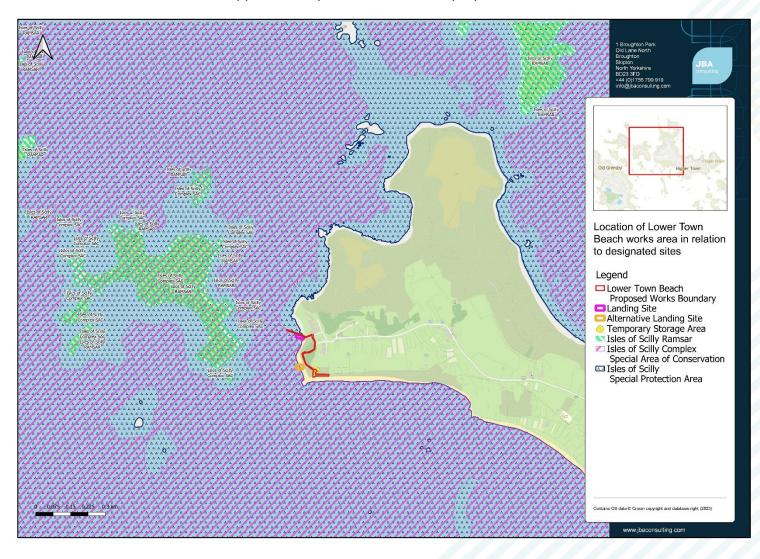
- Additional erosion protection for the beach access at the west of the beach. This is proposed to be an open grid product appropriate for vehicle loading that will fill with sand to match the existing appearance whilst providing erosion protection to this area.
- General pedestrian footpath management to limit and control access to the beach through provision of signage and short sections of fencing to allow access locations through the dunes along the beach time to recover, whilst still providing different access points through the dunes, without the need for any restoration or other intervention.
- Provision of removable slipway that can be lain as needed and removed and stored during winter to enhance beach access. This will be an aluminium mat that can be rolled out and back up as required with a maximum axle load of 13 tonnes to meet the requirements of the tractors and boat trailers typically used here.



# 4 European Sites

#### 4.1 Project Area of Influence and European Sites

The proposed scheme is located within the Isles of Scilly Complex Special Area of Conservation (SAC) and the Isles of Scilly Special Protection Area (SPA). The Isles of Scilly Ramsar sites is approximately 370m west of the proposed scheme on the island of Tean.



#### **Figure 4-1 Designated Sites Overview**

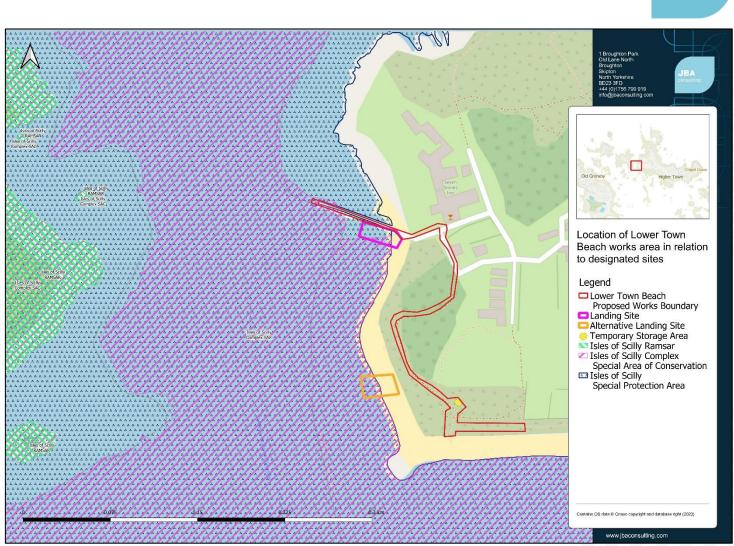


Figure 4-2 Designated Sites Close Up

# 4.2 Isles of Scilly Complex Special Area of Conservation (SAC)

#### 4.2.1 Qualifying Features

The SAC comprises 75% marine areas and sea inlets, 20% tidal rivers, estuaries, mudflats, sandflats, and lagoons (including saltwork basins) and 5% shingle, sea cliffs and islets.

- Annex I habitats under the Habitat Regulations that are a primary reason for selection: Annex I habitats under the Habitat Regulations that are a primary reason for selection:
  - Sandbanks which are slightly covered by sea water all the time.
  - Mudflats and sandflats not covered by seawater at low tide.
  - Reefs
- Annex II species that are a primary reason for selection:
  - Shore dock Rumex rupestris
- Annex II species present as qualifying feature, but not primary reason for selection:
  - Grey seal Halichoerus grypus

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#### 4.2.2 Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

#### 4.3 Isles of Scilly Special Protection Area (SPA)

#### 4.3.1 Qualifying Features

- The site qualifies under Article 4.1 of the Birds Directive (2009/147/EC) as it is used regularly by 1% or more of the Great Britain populations of the following species listed in Annex I in any season:
  - European storm-petrel *Hydrobates pelagicus*
- The site qualifies under Article 4.2 of the Birds Directive (79/409/EEC) as it is used regularly by 1% or more of the biogeographical populations of the following regularly occurring migratory species (other than those listed in Annex I) in any season:
  - Lesser black-backed gull Larus fuscus graellsii
  - European shag Phalacrocorax aristotelis aristotelis
  - Great black-backed gull Larus marinus
- The site qualifies under SPA selection stage 1.3 as it is used regularly by over 20,000 seabirds in any season: In the breeding season, the site regularly supports at least 26,478 (1999) individual seabirds. The main components of the assemblage include all of the qualifying features listed above.

#### 4.3.2 Conservation Objectives

The site's conservation objectives apply to the site and the individual species and/or assemblage of species for which the site has been classified (the "Qualifying features" listed above).

The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:

- the extent and distribution of the habitats of the qualifying features
- the structure and function of the habitats of the qualifying features
- the supporting processes on which the habitats of the qualifying features rely
- the populations of each of the qualifying features
- the distribution of qualifying features within the site



#### 4.4 Isles of Scilly Ramsar

#### 4.4.1 Qualifying Features

The site qualifies for Ramsar designation under Ramsar criterion 6 species/populations occurring at levels of international importance.

- Qualifying Species/populations (as identified at designation):
  - Species regularly supported during the breeding season:
    - European Storm Petrel, World 71 apparently occupied sites, representing an average of 0.2% of the GB population (Seabird 2000 Census)
    - Lesser black-backed gull, W Europe/Mediterranean/W Africa 3603 apparently occupied nests, representing an average of 2.4% of the breeding population (Seabird 2000 Census)
- Species/populations identified subsequent to designation for possible future consideration under criterion 6.
  - Species regularly supported during the breeding season:
  - European shag, Coastal N Europe 1091 apparently occupied nests, representing an average of 1.3% of the breeding population (Seabird 2000 Census)

#### 4.4.2 Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site



# 5 Screening Assessment

#### 5.1 Introduction

The project is not wholly directly connected with, or necessary to, the conservation management of the site's qualifying features. Therefore, a HRA screening assessment is required.

The following section identifies potential hazards of the proposed works. The effects of relevant hazards are then assessed in relation to each of the relevant qualifying features of the Isles of Scilly Complex SAC and the Isles of Scilly SPA and Ramsar. The likelihood of potential exposure to the hazard and the mechanism of effect are also identified where possible. This then allows for likely significant effects on the interest features of the designated sites to be identified.

#### 5.2 Potential Hazards to European Sites

The proposed project, as detailed in Section 3, was assessed in order to identify potential hazards that might arise to the relevant interest features of the Isles of Scilly Complex SAC and the Isles of Scilly SPA and Ramsar. The list of potential hazards to the European sites are based on the designated site features and conservation objectives. These are:

- Direct habitat loss
- Noise and visual disturbance
- Water pollution
- Air pollution
- Sediment release (temporary during construction)
- Alteration to coastal processes
- Physical damage/mortality
- Competition from invasive non-native species (INNS)

The results of this assessment are shown in Table 5-1.

#### 5.3 Potential in-combination effects

Other plans and projects with potential in-combination impacts were reviewed. No plans were identified that could potentially act in-combination with the proposed works. All of the planning applications within 1km of each of the sites are all small-scale works that have no direct connection to the site. There are no Nationally Significant Infrastructure projects within 1km of the site.

The proposed works assessed in this HRA are included within the Local Plan. Other coastal management works included within the Local Plan include proposed works for repairs to existing structures. The rest of the proposed works within the Local Plan include dune management and management of cliff recession. In-combination impacts with these projects and between the assessed projects has already been assessed in the Local Plan HRA.

Potential Hazard	Sandbanks	Mudflats	Reefs	Shore dock	Breeding Birds	Grey Seal
Habitat loss/community simplification	✓	✓	$\checkmark$	✓	✓	✓
Physical damage/mortality	$\checkmark$	$\checkmark$	V	$\checkmark$	✓	✓
Competition from invasive non-native species (INNS)	X	X	X	✓	✓	$\checkmark$
Noise and visual disturbance	Х	Х	x	X	✓	$\checkmark$
Water pollution	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Sediment release	$\checkmark$	$\checkmark$	$\checkmark$	X	X	$\checkmark$
Alteration to coastal processes	$\checkmark$	$\checkmark$	V	✓	×	✓
Table key: ✓ = hazard po	tentially relevan	it, X = hazard	not relevant		·	

# Table 5-1: Potential Hazards to Relevant Qualifying Features

#### 5.4 Assessment of Likely Significant Effects

Assessment of the hazards identified in Table 5-1 was undertaken to determine whether they would be likely to have a significant effect on the relevant qualifying features of the Isles of Scilly Complex SAC and the Isles of Scilly SPA and Ramsar and their supporting habitats, as a consequence of the project either alone or in combination with other plans or projects. The results of the screening assessment are given in Table 5-2. Plans and projects considered for the in-combination assessment are outlined in Section 5.3. Where appropriate, both construction and operational phase effects are considered.

#### Likely Significant Effect Qualifying **Risk (Pressure)** Likely Significant Effect Alone Yes or Yes or Feature No in Combination No Isles of Scilly Complex SAC Annex I Habitat The Annex I habitats 'sandbanks which are Yes In combination assessment carried Habitats: loss/community slightly covered by sea water all the time' forward to Appropriate Assessment and 'reefs' are not present within the works simplification -Sandbanks area and therefore no loss of these habitats which are is anticipated as part of the proposed works. slightly covered by Construction works will be limited to areas of sea water all the beach which are dry or inundated only at high tides. The tracking of vehicles across the time. the site may result in a small amount of -Mudflats and habitat loss or damage. Also as part of the sandflats not proposed works a vessel will be used to covered by transport construction materials to site, this seawater at is likely to be in the form of a barge. There is low tide. potential that the habitat 'sandflats not -Reefs covered by seawater at low tide' is present within the proposed landing site of the barge and therefore there is potential that the proposed works will impact this Annex I habitat.

#### Table 5-2: Assessment of Likely Significant Effects

Competition from invasive non- native species (INNS)	The proposed works have the potential to spread terrestrial invasive species, however there are no invasive species likely to be introduced or spread which would impact the annex I habitats present.	No	There is no potential for effects in combination with other PPPs.	No	JBA consulting
	Hottentot Fig has been recorded within the proposed works boundary and therefore an invasive species management plan will be put in place to ensure that the proposed works do not cause further spread of Hottentot Fig across the site.				
	Brown rats pose a threat to nesting birds within the Isles of Scilly and therefore biosecurity measures will be put in place to ensure the proposed works do not facilitate the spread of Brown rats across the site. Measures include the use of rope guards on the vessel transporting construction material and ensuring food and waste onboard are all contained in rodent proof containers.				
Water pollution	During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats within the SAC, in the absence of suitable on-site avoidance and mitigation measures.	Yes	In combination assessment forward to Appropriate Asse		
Alteration to coastal processes	The works are small in scale and will take place above the Mean High Water Spring (MHWS) tide level. A coastal processes assessment was undertaken as part of an EIA; this concluded that the scheme is unlikely to have a significant impact upon coastal processes either on its own or in combination with the other schemes.	No	There is no potential for effects in combination with other PPPs.	No	

	Physical damage/mortality	Reefs and sandbanks are not present within the works area and will therefore not be impacted. There is the potential for works to damage the habitat 'sandflats not covered by seawater at low tide' as construction works will be limited to areas of the beach which are dry or inundated only at high tides and the tracking of vehicles across the site may result in a small amount of damage to habitats present. As part of the proposed works a vessel will be used to transport construction materials to site in the form of a barge.	Yes	In combination assessment forward to Appropriate Asse	
Annex II species (primary reason for selection): Shore dock	Habitat loss/community simplification	No Shore dock was recorded on site during the site survey and it is believed to be absent from the works area with no recent records of Shore dock being present on St Martin. Recent surveys suggest that it may now be restricted to just the four islands Tresco, Annet, Samson, Tean (JNCC 2022).	No	No potential for effects in combination with other PPPs have been identified.	No
	Competition from invasive non- native species (INNS)	Hottentot Fig was recorded during the survey and is present within and near the works area. There is therefore the potential to spread this INNS, however this would not be expected to impact populations of Shore dock.	No	No potential for effects in combination with other PPPs have been identified.	No
	Water pollution	During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats with Shore dock present within the SAC, in the absence of suitable on-site avoidance and mitigation measures.	Yes	In combination assessment forward to Appropriate Asse	
	Physical damage/mortality	No Shore dock was recorded on site during the site survey. It is believed to be absent from the works area with no recent records	No	No potential for effects in combination with other PPPs have been identified.	No

		of Shore dock being present on St Martin. Recent surveys suggest that it may now be restricted to just the four islands Tresco, Annet, Samson, Tean (JNCC 2022).			
Annex II species (not primary reason for selection): Grey seal	Habitat loss/community simplification	The works area is not a known hauling out spot for seals, although it is possible that it is occasionally used as such. The works will result in a small area of temporary beach habitat loss, however there is ample alternative habitat available, and any potential impact on Grey Seals would be negligible. Habitat loss would be temporary for the duration of on-site works. Works will not result in loss of marine habitat.	No	No potential for effects in combination with other PPPs have been identified.	No
	Disturbance	Operations during the construction phase could cause noise disturbance and workers could cause visual disturbance to Grey seal that are hauled out. There is to be no impact pile driving or working in water; therefore there will be no	Yes	In combination assessment forward to Appropriate Asse	
		impacts on Grey Seals in the sea.			
	Water pollution	During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats used by Grey seal within the SAC, in the absence of suitable on-site avoidance and mitigation measures.	Yes	In combination assessment forward to Appropriate Asse	
	Physical damage/mortality	The works are small in scale and will take place above the Mean High Water Spring (MHWS) tide level. While it is possible for seals to be hauled out on the beach during the works, works would not continue if seals were present and likely to be harmed.	No	No potential for effects in combination with other PPPs have been identified.	No

European storm-petrel <i>Hydrobates</i> <i>pelagicus</i>	Habitat loss/ community simplification	The works area is not known as a breeding or foraging habitat for Storm petrel. Any habitat loss will be temporary, as the sand dunes and beach will be fully reinstated. There will therefore be no foraging or breeding habitat of Storm petrel lost as part of the proposed scheme.	No	No potential for effects in combination with other PPPs have been identified.	No
	Noise and visual disturbance	Operations during the construction phase could cause noise disturbance and workers could cause visual disturbance to Storm petrel within the Isles of Scilly SPA.	Yes	In combination assessment forward to Appropriate Asse	
	Water pollution	During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats used by breeding Storm petrel within the SPA, in the absence of suitable on- site avoidance and mitigation measures.	Yes	In combination assessment forward to Appropriate Asse	
	Physical damage/mortality	The works areas do not contain any nesting habitat for Storm petrel. Any birds present in the works area can reasonably be expected to move away from harm.	No	No potential for effects in combination with other PPPs have been identified.	No
European Shag <i>Phalacrocorax</i> <i>aristotelis</i> Great black- backed gull <i>Larus marinus</i> Lesser black-	Habitat loss/ community simplification	The works area is not known as a breeding or foraging habitat for Shag, Great black- backed gull, or Lesser black-backed gull. Any habitat loss will be temporary, as the sand dunes and beach will be fully reinstated. There will therefore be no foraging or breeding habitat of Annex I species lost as part of the proposed scheme.	No	No potential for effects in combination with other PPPs have been identified.	No
backed gull Larus fuscus	Noise and visual disturbance	Operations during the construction phase could cause noise disturbance and workers could cause visual disturbance to Shag, Great black-backed gull and Lesser black- backed gull within the Isles of Scilly SPA.	Yes	In combination assessment carried forward to Appropriate Assessment	

	Water pollution	During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats used by breeding Shag, Great black- backed gull and Lesser black-backed gull within the SPA, in the absence of suitable on- site avoidance and mitigation measures.	Yes	In combination assessment forward to Appropriate Asse	
	Physical damage/mortality	The works areas do not contain any nesting habitat for hag, Great black-backed gull or Lesser black-backed gull. Any birds present in the works area can reasonably be expected to move away from harm.	No	No potential for effects in combination with other PPPs have been identified.	No
Seabird assemblage	Habitat loss/ community simplification	The works area is not known as a breeding habitat for species as qualifying features of the SPA. Any habitat loss will be temporary, as the sand dunes and beach will be fully reinstated. There will therefore be no foraging or breeding habitat of breeding bird species lost as part of the proposed scheme.	No	No potential for effects in combination with other PPPs have been identified.	No
	Noise and visual disturbance	Operations during the construction phase could cause noise disturbance and workers could cause visual disturbance to breeding bird assemblages within the Isles of Scilly SPA.	Yes	In combination assessment forward to Appropriate Asse	
	Water pollution	During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats used by breeding bird assemblages within the SPA, in the absence of suitable on- site avoidance and mitigation measures.	Yes	In combination assessment carried forward to Appropriate Assessment	
	Physical damage/mortality	The works areas do not contain any nesting habitat for breeding bird species. Any birds	No	No potential for effects in combination with other PPPs have been identified.	No

		present in the works area can reasonably be expected to move away from harm.			
Isles of Scilly F	Ramsar				
Species regularly supported during the breeding season (as identified at designation): Storm Petrel Lesser black- backed gull	Habitat loss/ community simplification	The works area is not known as a breeding habitat for species as qualifying features of the Ramsar. Any habitat loss will be temporary, as the sand dunes and beach will be fully reinstated. There will therefore be no foraging or breeding habitat of breeding bird species lost as part of the proposed scheme.	No	No potential for effects in combination with other PPPs have been identified.	No
	Noise and visual disturbance	Operations during the construction phase could cause noise disturbance and workers could cause visual disturbance to breeding bird assemblages within the Isles of Scilly Ramsar.	Yes	In combination assessment forward to Appropriate Asse	
	Water pollution	During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats used by breeding birds within the Ramsar, in the absence of suitable on-site avoidance and mitigation measures.	Yes	In combination assessment forward to Appropriate Asse	
	Physical damage/mortality	The works areas do not contain any nesting habitat for breeding bird species qualified under the Ramsar. Any birds present in the works area can reasonably be expected to move away from harm.	No	No potential for effects in combination with other PPPs have been identified.	No
Species regularly supported during the breeding season	Habitat loss/ community simplification	The works area is not known as a breeding habitat for Shag. Any habitat loss will be temporary, as the sand dunes and beach will be fully reinstated. There will therefore be no foraging or breeding habitat of breeding Shag lost as part of the proposed scheme.	No	No potential for effects in combination with other PPPs have been identified.	No

(identified subsequent to designation): Shag	Noise and visual disturbance	operations during the construction phase		In combination assessment carried forward to Appropriate Assessment	
	Water pollution	During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats used by breeding birds within the Ramsar, in the absence of suitable on-site avoidance and mitigation measures.	Yes	In combination assessment carried forward to Appropriate Assessment	
	Physical damage/mortality	The works areas do not contain any nesting habitat for Shag. Any birds present in the works area can reasonably be expected to move away from harm.	No	No potential for effects in combination with other PPPs have been identified.	



#### 5.5 Screening Statement Conclusion

At stage 1 certain effects could not be screened out without appropriate management strategies put in place, those effects requiring appropriate assessment are summarised in Table 5-3 below.

# Table 5-3: Summary of screening conclusions for the project showing all screenedin hazards and European Sites

Qualifying Feature	Hazard	Likely significant effect alone or in combination
Isles of Scilly Complex SAC		
Annex I Habitats:	Habitat Loss	Both
Sandflats not covered by	Physical damage/mortality	Both
seawater at low tide.	Water pollution	Both
Annex II species (primary reason for selection):	Water pollution	Both
Shore dock		
Annex II species (not primary	Water pollution	Both
reason for selection): Grey seal	Disturbance	Both
Isles of Scilly SPA		
Storm Petrel	Water pollution	Both
	Disturbance	Both
Shag	Water pollution	Both
Great Black-backed Gull	Disturbance	Both
Lesser Black-backed Gull		
Breeding seabird assemblage	Water pollution	Both
	Disturbance	Both
Isles of Scilly Ramsar		
Species regularly supported	Water pollution	Both
during the breeding season (as identified at designation):	Disturbance	Both
Storm Petrel		
Lesser black-backed gull		
Species regularly supported	Water pollution	Both
during the breeding season (identified subsequent to designation): Shag	Disturbance	Both



# 6 Appropriate Assessment

#### 6.1 Introduction

Stage 2 of the HRA process is an Appropriate Assessment, which is required because likely significant effects caused by the proposed works have been identified on the Isles of Scilly Complex SAC and Isles of Scilly SPA and Ramsar. The Appropriate Assessment determines whether a project or plan would have an adverse impact on the integrity of a European site. In this assessment, avoidance or mitigation measures are applied to a point where the effects identified are no longer significant. If no significant impact on site integrity can be demonstrated beyond reasonable scientific doubt, the project or plan can proceed. If sufficient avoidance or mitigation measures cannot be applied, the project should not be taken forward in its current form unless there is a demonstration of no suitable alternatives and there are reasons of overriding public interest.

#### 6.2 European Sites

Table 6-1 below shows the European sites that have been screened into the Appropriate Assessment, as summarised in Table 5-3.

Site Name	Proximity to Site
Isles of Scilly Complex SAC	Within Site
Isles of Scilly SPA	Within Site
Isles of Scilly Ramsar	Approximately 350m

#### Table 6-1: European sites screened into this assessment

#### 6.2.1 Pollution Prevention Measures

Appropriate pollution prevention measures will be implemented to ensure that the habitats within proximity of the works, including the Isles of Scilly Complex SAC and Isles of Scilly SPA and Ramsar are not degraded as a result of pollution events during the construction phase. This mitigation will include:

- Following relevant guidance e.g. CIRIA Guidance: Control of water pollution from construction sites. Guidance for consultants and contractors (C532D) (Masters-Williams, 2001), including the delivery of toolbox talks to site staff.
- Any chemical, fuel and oil stores will be located on impervious bases within a secured bund with a storage capacity 110% of the stored volume.
- Biodegradable oils and fuels will be used where possible.
- Drip trays will be placed underneath any standing machinery to prevent pollution by oil/fuel leaks. Refuelling of vehicles and machinery will be carried out on an impermeable surface in one designated area well away from any watercourse or drainage (at least 10m) with capture of any spillages.
- Emergency spill kits will be available on site and staff trained in their use.
- Operators will check their vehicles on a daily basis before starting work to confirm the absence of leakages. Any leakages will be reported immediately.
- Daily checks will be carried out and records kept on a weekly basis and any items that have been repaired/replaced/rejected noted and recorded. Any items of plant machinery found to be defective will be removed from site immediately or positioned in a place of safety until such time that it can be removed.
- This mitigation is industry standard practice and as a result will be incorporated into the project through the Environmental Management Plan (EMP).



#### 6.3 Appropriate Assessment of Project Impacts and Mitigation

Taking into account the prevailing site conditions, screened in qualifying features, and the typical habitats and species necessary to the conservation of these features, the proposed works and mitigation measures and the conservation objectives for each European site, the following table details the Appropriate Assessment undertaken for the project. In Table 6-2. avoidance and mitigation measures are presented, and an assessment is made on whether an adverse impact remains after the mitigation is applied.

# Table 6-2: Appropriate Assessment of Hazards and Mitigation

Qualifying Features	Description of adverse effect(s)	Can adverse effect(s) be mitigated	Description of mitigation measures, and how they would be applied (e.g. contractual obligations, consent conditions)	Can adverse effect on site integrity be ruled out?
Isles of Scilly Cor	nplex SAC			
Annex I Habitats: -Sandflats not covered by seawater at low tide.	Habitat Loss: Construction works will be limited to areas of the beach which are dry or inundated only at high tides and as part of the proposed works a vessel will be used to transport construction materials to site, this is likely to be in the form of a barge. There is potential that the habitat 'sandflats	Yes	Any habitat loss via the construction works and barge landing will be temporary and localised. To minimise disturbance and habitat degradation plant will keep to agreed haul routes and not stray outside of these areas. It is	Yes
r F t t	not covered by seawater at low tide' is present within the proposed landing site of the barge and therefore there is potential that the proposed works will impact this Annex I habitat.		considered that in this case the haul routes will rapidly recover following the completion of the works.	
	Physical damage/mortality: There is the potential for works to damage the habitat 'sandflats not covered by seawater at low tide' as construction works will be limited to	Yes	Any damage to habitats present within the sites via the construction works and barge landing will be temporary and localised.	Yes
	areas of the beach which are dry or inundated only at high tides and as part of the proposed works a vessel will be used to transport construction materials to site in the form of a barge.		To minimise disturbance and habitat degradation plant will keep to agreed haul routes and not stray outside of these areas. It is considered that in this case the haul routes will rapidly recover following the completion of the works.	
	Water pollution: Construction activity may result in accidental fuel or concrete spills which could cause changes in water chemistry and habitats classified within the Isles of Scilly Complex SAC.	Yes	Strict pollution prevention measures will be implemented on site, as outlined in Section 6.2.1	Yes

Annex II species (primary reason for selection): Shore dock	Water pollution: During the construction phase, accidental fuel or concrete spills could cause changes in water chemistry and impact upon the habitats with Shore dock present within the SAC, in the absence of suitable on-site avoidance and	Yes	Strict pollution prevention measures will be implemented on site, as outlined in Section 6.2.1	Yes	JB consu
Annex II species (not primary reason for selection): Grey seal	<ul> <li>Water pollution: Construction activity may result in accidental fuel or concrete spills which could cause changes in water chemistry and habitats classified within the Isles of Scilly Complex SAC.</li> </ul>	Yes	Strict pollution prevention measures will be implemented on site, as outlined in Section 6.2.1	Yes	
	Disturbance: Construction activity will cause an increased amount of noise and activity which may disturb any seals that are hauled out in the surrounding area.	Yes	The proposed scheme is not located near any known breeding colonies, with the closest main seal breeding area being the Eastern Isles to the southeast of St Martins. The works area is not a known hauling out spot for seals, although it is possible it is occasionally used as such by some individuals. There is ample alternative habitat available, and therefore any potential impact on Grey Seals would be negligible. Haul out areas should be confirmed by local wildlife groups before works begin.	Yes	
			Should a seal be encountered on site works will not take place if a seal is hauled out on the beach or foreshore within 200m of the works. Works will not resume until the seal has moved off of its own accord.		

Storm Petrel	Water pollution: Construction activity may result in accidental fuel or concrete spills which could cause changes in water chemistry and habitats utilised by Storm petrel within the SPA.	Yes	Strict pollution prevention measures will be implemented on site, as outlined in Section 6.2.1	Yes
	Disturbance: Construction activity will cause an increased amount of noise and activity which may disturb Storm petrel populations within the SPA.	Yes	Storm petrels are not known to nest on St Martins or on the island of Tean (the closest island also designated within the SPA).	Yes
			The proposed works are sufficiently far away from known nesting sites of Storm petrel associated with the SPA and it is therefore not considered that the works will result in disturbance to these species.	
Shag Great Black- backed Gull	Water pollution: Construction activity may result in accidental fuel or concrete spills which could cause changes in water chemistry and habitats utilised by breeding bird species within the SPA.	Yes	Strict pollution prevention measures will be implemented on site, as outlined in Section 6.2.1	Yes

					_ JB
Lesser Black- backed Gull	Disturbance: Construction activity will cause an increased amount of noise and activity which may disturb Shag, Great Black-backed Gull or Lesser Black-backed Gull utilising the SPA.	Yes	Greater black-backed gulls and Shag are known to breed within the SPA on St Martins, whilst Lesser black- backed gulls are known to nest within the SPA to west of the proposed site on Tean. The proposed works are sufficiently far away from known nesting sites of the qualifying bird species listed associated with the SPA and it is therefore not considered that the works will result in disturbance to these species. This will continue to be reviewed in line with the latest survey data and on site prior to any works starting.	Yes	cons
			Coastal works will be timed, where possible, to avoid the winter period in order to avoid visual and noise impacts to wintering birds.		
Breeding seabird assemblage	Water pollution: Construction activity may result in accidental fuel or concrete spills which could cause changes in water chemistry and habitats utilised by breeding bird species within the SPA.	Yes	Strict pollution prevention measures will be implemented on site, as outlined in Section 6.2.1	Yes	

	Disturbance: Construction activity will cause an increased amount of noise and activity which may disturb breeding bird species utilising the SPA.	Yes	The proposed works are sufficiently far away from any known nesting sites of the qualifying bird species listed associated with the SPA and it is therefore not considered that the works will result in disturbance to these species. This will continue to be reviewed in line with the latest survey data and on site prior to any works starting. Coastal works will be timed, where possible, to avoid the winter period in order to avoid visual and noise impacts to wintering birds.	Yes	JBA consulting
Isles of Scilly Ram	sar	-			
Species regularly supported during the breeding season (as	Water pollution: Construction activity may result in accidental fuel or concrete spills which could cause changes in water chemistry and habitats utilised by breeding bird species within the Ramsar.	Yes	Strict pollution prevention measures will be implemented on site, as outlined in Section 6.2.1	Yes	

identified at designation): Storm Petrel Lesser black- backed gull	Disturbance: Construction activity will cause an increased amount of noise and activity which may disturb breeding bird species.	Yes	Storm petrels are not known to nest on St Martins or on the island of Tean (the closest island designated within the Ramsar) however Lesser black-backed gulls are known to nest within the Ramsar site to west of the proposed site on Tean.	Yes
			The proposed works are sufficiently far away from known nesting sites of seabirds associated with the Ramsar and it is therefore not considered that the works will result in disturbance to these species. This will continue to be reviewed in line with the latest survey data and on site prior to any works starting.	
Species regularly supported during the breeding season (identified	Water pollution: Construction activity may result in accidental fuel or concrete spills which could cause changes in water chemistry and habitats utilised by breeding bird species within the Ramsar.	Yes	Strict pollution prevention measures will be implemented on site, as outlined in Section 6.2.1	Yes
subsequent to designation): Shag	Disturbance: Construction activity will cause an increased amount of noise and activity which may disturb breeding bird species.	Yes	Shag are known to breed within the SPA on the outer isles of St Martins (Pernagie and Guther's). The proposed works are sufficiently far away from known nesting sites of seabirds associated with the Ramsar and it is therefore not considered that the works will result in disturbance to these species. This will continue to be reviewed in line with the latest survey data and on site prior to any works starting.	Yes

**BA** insulting



#### 6.4 Implementation of Mitigation

The mitigation measures listed above are to be included in the Method Statement produced by the contractor who will be undertaking the works. The appointed contractor will therefore be responsible for ensuring that all on-site mitigation measures are implemented effectively.

# 7 Appropriate Assessment Conclusions

The proposed scheme will not have an adverse impact upon the Isles of Scilly Complex SAC and Isles of Scilly SPA and Ramsar either alone or in combination with any other plans or projects, providing the following mitigation measures are implemented:

• Industry standard pollution prevention measures, particularly addressing the risks of fuel and concrete spills.



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