# ATTACHMENT 4.3 SISAA

## Remediation of the Former Irish Steel Works Factory Site

IE001330-TT-EN-XX-RP-Z-0006

Department of Defence

TETRA TECH

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# 1 Introduction

## 1.1 Overview

Haulbowline Island is situated centrally within Cork Harbour, approximately 14 km southeast of Cork City, immediately south of Cobh and west of Spike Island (**Figure 1-1**). Access to the island by road is via a bridge from Ringaskiddy at Paddy's Point. The bridge also provides access to Rocky Island, a small island approximately halfway between Paddy's Point and Haulbowline which accommodates a crematorium.

Haulbowline Island is currently in state ownership (Department of Defence (DoD)) and has undergone extensive industrial, maritime, and defence-related use for more than 200 years. The island is circa 35 hectares in total. The area which will be assessed as part of this Maritime Usage Licence (MUL) application is located in central west part of the island and was formerly occupied by the Irish Steelworks Factory (ISPAT), whose operations commenced in 1938 and ran until cessation in 2001 (circa 8.78 hectares).

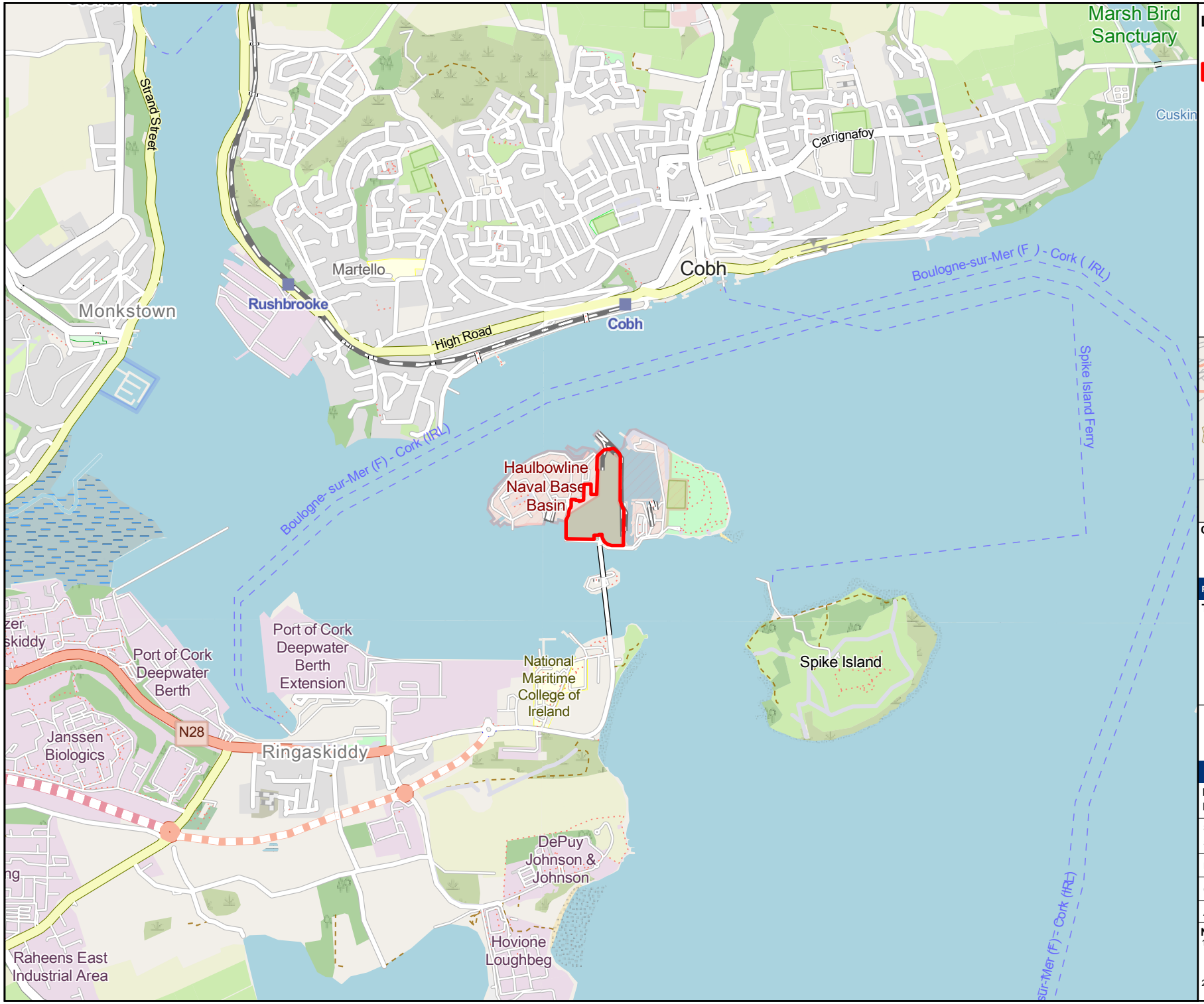
The DoD has identified the strategic need to develop the former ISPAT site to support the naval base to the west and the naval dockyard to the east. To facilitate the design of this development, site investigations are required on the former ISPAT site.

**Figure 1-1** shows the location and boundary of the of the former ISPAT site (in red) on Haulbowline Island, while **Figure 1-2** shows the MUL Areas relative to the State recognised Ungeneralised High Water Mark (HWM, in blue).

This MUL application is required to undertake site investigations (hereafter referred to as the SI works) upon Haulbowline Island in Cork Harbour. The SI works will be undertaken entirely on made land on Haulbowline Island, however, as parts of the area to be investigated fall below the historic, ungeneralised HWM, a MUL is required. MUL Areas A, B, C and D are outlined on **Figure 1-2**.

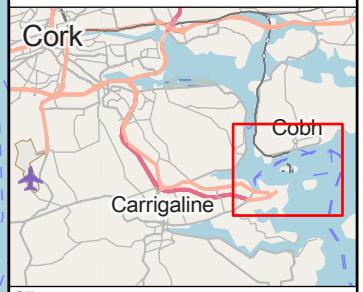
These SI works, which are discussed in more detail in **Section 2**, are required to inform detailed construction and engineering design of the remediation of the former Irish steelworks factory site and to provide baseline data for any subsequent environmental assessments. Information collected by the SI works will support the overall remediation of the former Irish steelworks factory site.

For the avoidance of doubt, no construction works associated with remediation of the former Irish steelworks factory site are included under this MUL application.




**Legend**

**BOUNDARY OF ISPAT SITE**




**Client**

**Dept. of Defence**

**Remediation of the former Irish Steelworks Factory Site**

**Title**

**Site Location Map**

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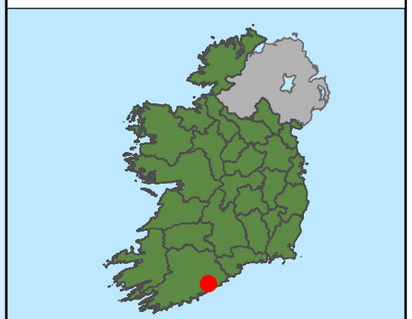

## Legend

- Maritime Usage Licence Areas
- High Water Mark

Where the MUL area abuts the land, the boundary of the MUL area should coincide with and follow exactly the High Water Mark as defined by the Chief Boundary Surveyor


Drawn By:
Marcela Tiyoko Passos Kondo, MSc Geographic Information Science
Scientist GIS


**Data Sources:** Tailte Éireann



**Client**

**Dept. of Defence**

**Remediation of the former Irish Steelworks Factory Site**

**Title**

**Proposed MUL Map**

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## 1.2 Purpose of this Report

The purpose of this Supporting Information for Screening for Appropriate Assessment Report is to provide supporting information to accompany an application by the Applicant for a MUL from the Maritime Area Regulatory Authority (MARA).

## 1.3 Statement of Authority

The technical competence of the authors is outlined below:

**Aoife Edgely** is an Associate Marine Scientist in the Environmental Services Business Unit in Tetra Tech. She has over 15 years' experience in the marine science field and is a Chartered Environmentalist and a Full Member of the Institute of Environmental Sciences. Aoife holds an honours degree in Environmental Science from Trinity College Dublin and a master's in marine environmental Protection from Bangor University, Wales. Aoife has delivered the environmental assessments for a wide range of marine and coastal projects, including environmental impact assessment, appropriate assessment and Annex IV species reports.

**Rachael Shaw** is a Project Scientist in the Environmental Services Business Unit in Tetra Tech. She holds a Bachelor's degree in Marine Science from the University of Galway and Master's degree in Climate Change and Managing the Marine Environment from Heriot-Watt University Edinburgh. She has five years' experience working in consultancy, assisting on a wide range of projects from offshore renewable energy projects to flood relief schemes, including marine and terrestrial surveys. She is a full member with Institute of Environmental Sciences (IES).

**Róisín Murphy** is a Scientist in the Environmental Services Business Unit in Tetra Tech. She holds an honours degree in Zoology (B.Sc.) and master's degree in marine biology, both from University College Cork. She has two years' experience as a Project Manager at Cork Nature Network, responsible for marine and river surveys, and one year's experience in marine licensing and flood relief projects within Tetra Tech. She is a qualifying member with IES.

## 1.4 Legislation

### 1.4.1 European Legislation

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (the Habitats Directive) provides protection for habitats and species of European importance; Council Directive 2009/147/EC on the conservation of wild birds (Codified version) (the Birds Directive) aims to protect all of the 500 wild bird species naturally occurring in the European Union (EU). Areas designated for protection under the Habitats Directive are described as Special Areas of Conservation (SAC) and those designated under the Birds Directive as Special Protection Areas (SPA) and the sites are known collectively as the Natura 2000 network which includes European sites (see **Section 1.4.2.4**). As each member of the EU is required to designate areas in their jurisdictions, the establishment of this network of European sites under Articles 3 to 9 of the Habitats Directive is the key measure to protect nature and biodiversity in the EU.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to have a significant effect on or to adversely affect the integrity of Natura 2000 sites. Article 7 of the Habitats Directive extends the scope of its articles 6(3) and 6(4) to the Birds Directive.

Article 6(3) establishes the requirement for Appropriate Assessment (AA):

> *"Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. Considering the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the public."*

Further detail on the stages of AA is provided in **Section 3.2**.

In the context of the marine works to which this MUL application relates, the Habitats and Birds Directives have been transposed into Irish Legislation under, amongst other things, the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

Each European site has assigned Conservation Objectives (COs) and a list of Qualifying Interests (QI). The CO concept appears in the eighth recital of the Habitats Directive which reads: *"whereas it is appropriate, in each area designated, to implement the necessary measures having regard to the conservation objectives pursued". Article 1 then explains that "conservation means a series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status".*

The National Parks and Wildlife Service (NPWS) has established COs for each European site in Ireland. These are published on their website. NPWS advise in the general introductory notes of their site-specific conservation objectives (SSCO) series publications, that an appropriate assessment based on their *"published conservation objectives will remain valid even if the CO targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out".* NPWS advise that to assist in that regard, it is essential that the date and version are included when objectives are cited.

## 1.4.2 National Legislation

### 1.4.2.1 Maritime Area Planning Act

The Maritime Area Planning Act, 2021 (as amended) established MARA. One of the functions of MARA is to determine applications for the granting of licences to undertake any of the activities included in Schedule 7 of the Maritime Area Planning Act, 2021 (as amended).

The following definitions in relation to Appropriate Assessment (AA) are included in Section 2(1) of the Maritime Area Planning Act, 2021 (as amended):

> *"screening for appropriate assessment" shall be construed in accordance with, as appropriate—*
>
> *(a) section 177U of the Act of 2000, or*
>
> *(b) Part 5 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011)*
>
> *"appropriate assessment" shall be construed in accordance with, as appropriate—*
>
> *(a) section 177V of the Act of 2000, or*
>
> *(b) Part 5 of the European Communities (Birds and Natural Habitats) Regulations (S.I. No. 477 of 2011);*

where the Act of 2000 refers to the Planning and Development Act 2000 (as amended).

Under Section 112 of the Maritime Area Planning Act, 2021 (as amended), MARA has been designated as a competent authority for the purposes of Part 5 of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011); and appropriate assessments to which that Part applies.

MARA is required to carry out a screening for Appropriate Assessment (AA) in accordance with Section 117(4)(a) of the Maritime Area Planning Act, 2021 (as amended).

Where MARA determines that an AA is required it shall carry out the AA in accordance with Section 117(7)(a) of the Maritime Area Planning Act, 2021 (as amended).

### 1.4.2.2Screening Out for AA

Under Regulation 42(7) of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) the competent authority in this case MARA shall determine that an AA of a project *is not required* where the plan or project is not directly connected with or necessary to the management of the site as a European Site *and* if it can be excluded on the basis of objective scientific information following screening that the project, individually or in combination with other plans or projects, will have a significant effect on a European site.

### 1.4.2.3Screening In for AA

Under Regulation 42(6) of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) the competent authority shall determine that an AA of a plan or project *is required* where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site. Under Section 117(4) of the Maritime Area Planning Act, 2021 (as amended) the MARA shall, as soon as is practicable after it receives a MUL application and if it considers it necessary to do so in its capacity as the competent authority, carry out screening for Appropriate Assessment in respect of the proposed maritime usage the subject of the application.

Where the competent authority determines that an AA is required, they shall make a determination under Article 6(3) of the Habitats Directive as to whether or not the proposed development would adversely affect the integrity of a European site and an Appropriate Assessment shall be carried out by the competent authority before consent is given for the proposed development - see Regulation 42(11) European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

### 1.4.2.4European Sites and Natura 2000 Sites

The term European site is defined in the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) as:

> *"European Site" means—*
> *(a) a candidate site of Community importance,*
> *(b) a site of Community importance,*
> *(c) a candidate special area of conservation,*
> *(d) a special area of conservation,*
> *(e) a candidate special protection area, or*
> *(f) a special protection area.*

The term Natura 2000 is defined in the same Regulations as:

> *"Natura 2000" means the European network of special areas of conservation under the Habitats Directive and special protection areas under the Birds Directive, provided for by Article 3(1) of the Habitats Directive and, for the purposes of these Regulations, includes European Sites.*

As such, and as adopted in this report, the term European site refers to one of the sites comprising the Natura 2000 network.

# 2 Project Description

## 2.1 Overview

In order to provide a reliable basis for design and development, and to support the construction phase of the Project, the SI works required consist of up to 20 No. trial pits, up to 6 No. boreholes (Incl. SPT), and land-based geophysical surveys anywhere within the MUL Areas, all located below the ungeneralised HWM. No other SI works are proposed as part of this MUL.

The proposed SI locations are provided in **Figure 2-1**. These proposed locations are subject to minor refinement. Similarly, a proposed borehole location may be moved due to the presence of obstructions/refusals, i.e., where a subsurface object (large boulder), prevents the advancement of the borehole. In such circumstances, the borehole will be moved to another nearby location (as close as practical to the original point) and re-drilled.

The proposed SI works as detailed in this MUL include contingencies to for follow up investigations that may be undertaken at refined locations.

An overview of the SI works is presented in **Table 2-1**. A more detailed breakdown of the proposed investigation methodologies is provided in **Attachment 3.1** – Proposed Maritime Usage (report ref: IE001330-TT-EN-XX-RP-Z-0005).

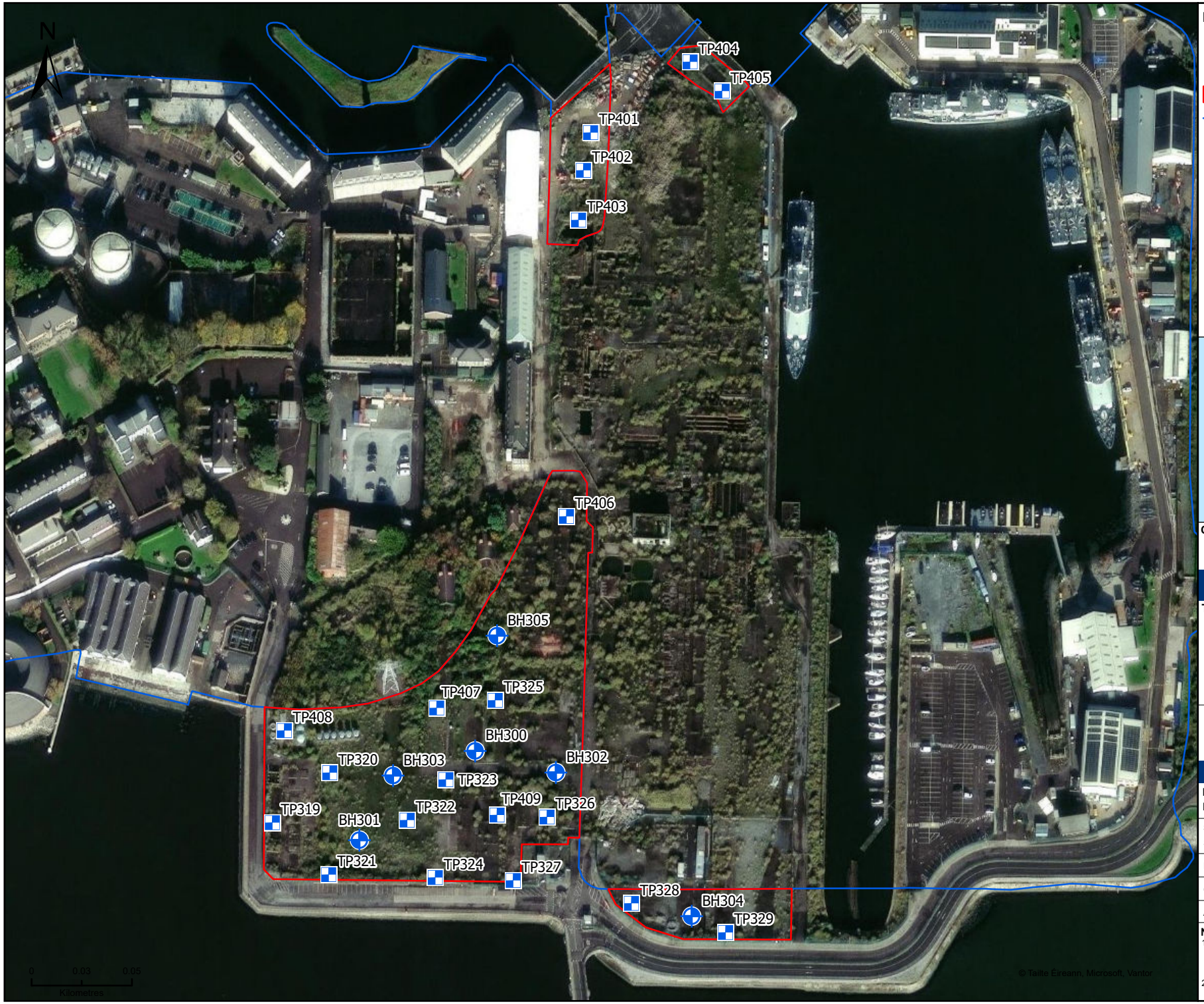
**Table 2-1: Overview of Proposed SI Activities**

| Survey | Type | Equipment / Method | Number (No.) |
|---|---|---|---|
| Ground Investigation Works | Trial pit | 22-tonne tracked mechanical excavator | 20 |
| Ground Investigation Works | Borehole drilling | Geobor S rotary core drilling rig | 6 |
| Geophysical Survey | Geophysical | Ground Penetrating Radar (GPR) transects | 12 |

## 2.2 Estimated Project Schedule / Programme

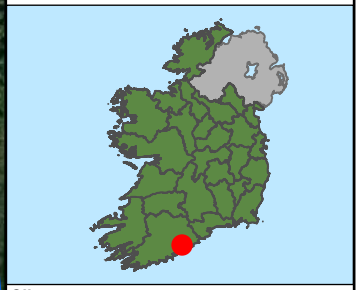
While the MUL application is for a five-year period, the site investigation works are anticipated to be phased as follows:

- Initial investigations in 2027 (circa 3 months duration) to support preliminary design of the capping system, roads and drainage systems; and
- Further follow up investigations at key locations to support the detailed design of structures in 2028-2031.




**Legend**

- Trial Pit Locations
- Borehole Locations
- Maritime Usage Licence Areas
- High Water Mark



**Client**

**Dept. of Defence**

**Remediation of the former Irish Steelworks Factory Site**

**Title**

**Proposed Geophysical and Geotechnical SI Locations**

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# 3 Methodology

## 3.1 Appropriate Assessment Guidance

This SISAA report has been completed in accordance with the EU and national guidance documents that pertain to Member States' fulfilling their requirements under the EU Habitats Directive, with particular reference to Article 6(3) and 6(4) of that Directive. The methodology followed in relation to this SISAA has complied with the following guidance:

- EC (2000). Communication from the Commission on the Precautionary Principle. Office for Official Publications of the European Communities, Luxembourg;
- EC (2002). Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission;
- EC (2007). Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC. European Commission;
- DoEHLG (2009, rev. 2010). Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government;
- EC (2013). Interpretation Manual of European Union Habitats. Version EUR 28. European Commission, Luxembourg;
- EC (2018). European Commission Notice C (2018) 7621 'Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC', Office for Official Publications of the European Communities, Luxembourg;
- OPR (2021). Practice Note PN01: Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Dublin Ireland; and
- EC (2021). European Commission Notice C (2021) 6913 'Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC', Office for Official Publications of the European Communities, Luxembourg.

Appropriate Assessment (AA) is a four-stage process with tests at each stage. The four stages are summarised diagrammatically in **Figure 3-1**. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

Stages 1-2 deal with the main requirements for assessment under Article 6(3) of the Habitats Directive. Stage 3 is a precursor to Stage 4 which is the main derogation step of Article 6(4).

## 3.2 Stages of Appropriate Assessment

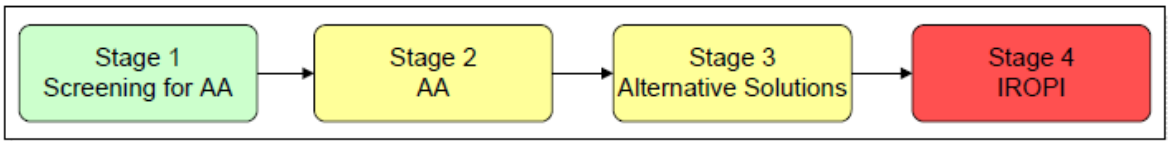



**Figure 3-1 Four Stages of Appropriate Assessment**

The screening for AA carried out by the competent authority (Stage 1), will determine whether an AA (Stage 2) for this MUL application is required. The purpose of the screening stage is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in-combination with other plans or projects, could have significant effects on a European site in view of the site's conservation objectives.

There is no necessity to establish such an effect; it is merely necessary for the competent authority to determine that there may be such an effect. The need to apply the precautionary principle in making any key decisions in relation to the tests of Appropriate Assessment (AA) has been confirmed by the case law of the Court of Justice of the European Union (CJEU). Plans or projects that have no appreciable effect on a European site may be excluded. The threshold at this first stage is a very low one and operates as a trigger in order to determine whether a Stage Two AA must be undertaken by the competent authority on the implications of the proposed development for the conservation objectives of a European site. Therefore, where significant effects are likely, uncertain or unknown at screening stage, a second stage AA will be required

Stage 2 is required if it cannot be excluded, on the basis of the objective information provided at Stage 1, that the SI Works, individually or in combination with other projects or plans, will have a significant effect on a European site, in view of the site's conservation objectives. In this case, a Natura Impact Statement (NIS) must be prepared to assist the competent authority to conduct the Stage 2 AA. Stage 2 AA is a focused and detailed examination, analysis and evaluation carried out by the competent authority of the implications of the plan or project, alone and in-combination with other plans and projects, on the integrity of a European site in view of that site's conservation objectives. Case law has established that such an Appropriate Assessment, to be lawfully conducted, in summary:

(i) must identify, in the light of the best scientific knowledge in the field, all aspects of the proposed development which can, by itself or in-combination with other plans or projects, affect the conservation objectives of the European site;

(ii) must contain complete, precise and definitive findings and conclusions and may not have lacunae or gaps; and

(iii) may only include a determination that the proposed development will not adversely affect the integrity of any relevant European site where the competent authority decides (on the basis of complete, precise and definitive findings and

conclusions) that no reasonable scientific doubt remains as to the absence of the identified potential effects. If adverse impacts can be satisfactorily avoided or successfully mitigated at this stage, so that no reasonable doubt remains as to the absence of the identified potential effects, then the process is complete. If the assessment is negative, i.e. adverse effects on the integrity of a site cannot be excluded, then the process must proceed to stage three and, if necessary, stage four.

If it is not possible during Stage 2 to avoid adverse effects on the integrity of one or more European sites through avoidance and/or mitigation, Stage 3 of the process must be undertaken which is to objectively assess whether alternative solutions exist by which the objectives of the plan or project can be achieved. If it can be demonstrated that there are no reasonable alternative solutions, the AA progresses to Stage 4. This final stage is undertaken when it has been determined that negative impacts on the integrity of a European site will result from a plan or project and there are no alternative solutions. At Stage 4 of the AA process, the competent authority must determine if, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, the project must nevertheless be carried out for imperative reasons of overriding public interest, or 'IROPI', including those of a social or economic nature. In such circumstances, the Member State is required to take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected.

While there is no prescribed form or content for reporting (DoEHLG, 2009) the methodology and format adopted in this report has been in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2021) and the European Commission Guidance 'Managing Natura 2000 sites' (EC, 2018), guidance prepared by the NPWS (DoEHLG, 2009) and by the Office of the Planning Regulator (OPR, 2021).

As per DoEHLG (2009):

> *The first test is to establish whether, in relation to a particular plan or project, appropriate assessment is required.*

In summary, the test for the screening for AA is to determine on the basis of a preliminary assessment and objective scientific information could there be effects in view of the site's conservation objectives. There is no necessity to establish such an effect; it is merely necessary for the competent authority to determine that there may be such an effect. The need to apply the precautionary principle in making any key decisions in relation to the tests of Appropriate Assessment (AA) has been confirmed by the case law of the Court of Justice of the European Union (CJEU). Plans or projects that have no appreciable effect on a European site may be excluded. The threshold at this screening stage is a very low one and operates as a trigger in order to determine whether an AA must be undertaken by the competent authority on the implications of the proposed development for the conservation

objectives of a European site. Therefore, where significant effects are likely, uncertain or unknown at screening stage, an AA and NIS will be required.

## 3.3 Stage 1 Screening / Test of Significance

This process identifies whether the proposed development is directly connected to or necessary for the management of a European site(s) and identifies whether likely significant effects upon a European site(s) can be excluded, either alone or in combination with other projects or plans.

The screening for AA will incorporate the following steps:

1. Determining whether a project is directly connected with or necessary to the conservation management of any European sites;
2. Describing the project;
3. Identifying the European sites potentially affected by the project or plan;
4. Identifying and describing any potential effects of the project or plan on European sites, alone, or in combination with other plans/projects; and
5. Assessing the likelihood of significant effects on European sites.

The output from this stage is a determination for each European site(s) of not significant, significant, potentially significant, or uncertain effects. The latter three determinations will cause that site to be brought forward to Stage 2.

## 3.4 Desk Study

Information on the receiving environment was analysed to determine the potential for significant effects to QIs and SCIs of the European sites with established connectivity to the SI works (see **Section 5.3**). The following publications and data sources were reviewed in October 2026:

- Information on ranges of mobile QI populations in Volume 1 of NPWS' Status of EU Protected Habitats and Species in Ireland (NPWS, 2025), and associated digital shapefiles obtained from the NPWS Research Branch;
- BirdWatch Ireland (https://birdwatchireland.ie/);
- Mapping of European site boundaries and Conservation Objectives for relevant sites, available online from the NPWS including Site Synopses, European site Data Forms and Conservation Objective Supporting Documents, where available (https://www.npws.ie/protected-sites);
- Distribution records for QI of European sites held online by the National Biodiversity Data Centre (NBDC) (https://biodiversityireland.ie/);
- EMODnet (2026) Map Viewer. Available at: EMODnet Map Viewer accessed October 2026.
- Data gathered from two site visits which were conducted for invasive alien plant species (IAPS) and otter on the 16/04/2026 and 26/08/2026 respectively.

## 3.5 Identification of Relevant European Sites

### 3.5.1 Source-Pathway Receptor Model

The identification of relevant European sites to be included in this report was based on the identification of the 'zone of influence (ZoI)' of the SI works using a Source-Pathway-Receptor (S-P-R) model where:

- A 'source' is defined as the individual element of the proposed works that has the potential to impact on a European site, its qualifying features, and its COs;
- A 'pathway' is defined as the means or route by which a source can affect the ecological receptor; and
- A 'receptor' is defined as QI of SACs or SPAs for which COs have been set for the European site(s) being assessed.

An S-P-R model is a standard tool used in environmental assessment. In order for an effect to be likely, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism results in no likelihood for the effect to occur. The S-P-R model was used to identify a list of European sites, and their QIs, to which the SI works are potentially linked. These are termed as 'relevant' sites/QIs throughout this report.

### 3.5.2 Zone of Influence

Determination of the SI works' ZoI was achieved by assessing the SI works against the ecological receptors within the MUL Area, in addition to the ecological receptors that could be connected to and subsequently impacted by the project through abiotic and biotic vectors.

The proximity of the SI works to European sites, and more importantly, QIs and SCIs of the European sites, is of importance when identifying potentially likely significant effects. In accordance with the OPR AA Screening Guidelines (2021), the S-P-R model has been used to identify the ZoI to ensure that relevant European sites are identified. The S-P-R model minimises the risk of overlooking distant or obscure effect pathways, while also avoiding an over reliance on buffer zones (e.g., 15 km), within which all European sites should be considered. This approach follows the DoEHLG 2009 guidance on AA which states that:

> *"For projects, the distance could be much less than 15 km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects" (DoEHLG, 2009; p.32, para 1).*

The ZoI of the SI works on mobile species (e.g., birds, mammals, and fish), and static species and habitats (e.g., saltmarshes, woodlands, and flora) is considered differently. Mobile species have 'range' outside of the European sites in which they are QI. The range of mobile QI species varies considerably, from several metres (e.g., in the case of whorl

snails *Vertigo* spp.), to hundreds of kilometres (in the case of migratory wetland birds). A project's ZoI may extend well beyond the project boundary and can impact or have an effect on static species and habitats remote from the SI works; for example, where an aquatic QI habitat or plant is located many kilometres downstream from a pollution source. In particular, hydrological linkages between the SI works and European sites (and their QIs) can occur over significant distances; however, any effect will be site-specific depending on the receiving water environment and nature of the potential impact.

To this end, the ZoI for this project extends outside of the immediate SI works MUL Area to include ecological receptors connected to the project through proximity and connectivity through features such as watercourses and waterbodies in addition to potential connectivity through land and air. See **Section 5.3** for the identification of relevant European sites.

# 4 Desk Study

This section details the results of the desk study undertaken to describe the receiving environment of the SI works. The relevant receiving environment relates to anything that may be directly or indirectly related to the QIs/SCIs of the relevant European Sites. The MUL Area is located on Haulbowline Island wholly within Cork Harbour and does not overlap any European sites.

## 4.1 Field Studies

Two field surveys have been conducted in support of the wider project at the Steelworks site. A specific IAPS survey across the IAPS survey area was carried out on the 16/04/2026 by a qualified ecologist in order to inform the IAPS report for the wider project (See **Section 4.3**).

A site visit was conducted on 26/08/2026 by a qualified ecologist to identify the potential for otter activity within the site boundary and MUL Area (See **Section 4.4.1**).

## 4.2 Habitats

The MUL Areas cover a combined area of 23,460m$^2$ (2.35ha) on Haulbowline Island, coinciding with areas below the ungeneralised HWM, which has not been updated since this land was reclaimed. While the proposed SI works will occur below the HWM, as mapped, all activities will take place on reclaimed land and thus no direct interactions between the proposed SI works and the marine environment are anticipated. The SI works are located within an area of colonised bare ground, with areas of native and non-native ornamental scrub. The desk study concluded that there are no Annex I habitats located within the footprint of the site.

## 4.3 Invasive Alien Plant Species

The control of IAPS in Ireland is regulated through the European Communities (EC) (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011), (as amended), and also through the European Union (EU) (Invasive Alien Species) Regulations 2024 (SI 374 of 2024). Both of these pieces of legislation state that it is an offence to introduce or spread certain invasive alien species or their propagules. These species are listed under the Third Schedule of SI 477 of 2011, as amended and under the First Schedule of SI 374 of 2024. A specific IAPS survey across the central west part of the island (which overlaps the MUL Area), was carried out on the 16/04/2026 by a qualified ecologist in order to inform the IAPS report for the wider project. This survey established the existing environment on site and the presence/absence of Scheduled IAPS. During the survey, information of any Scheduled IAPS observed, including the species, the GPS location of the species and the approximate extent of the infestation was recorded and logged *in situ* using the ArcGIS FieldMaps application. Photographs of identified Scheduled IAPS infestations were also taken and attached to its corresponding GPS location.

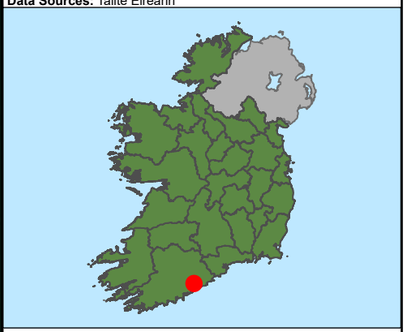
The Scheduled Species identified during the field survey were Spanish/hybrid bluebell (*Hyacinthoides hispanica/Hyacinthoides x massartiana*) and Rhododendron (*Rhododendron ponticum*). These infestations were located within the western half of the Steelworks site, primarily adjacent to existing buildings. One of these records (SB04) for Spanish/hybrid bluebell were located within the Area B (See **Figure 4-1**).




## Legend

- Maritime Usage Licence Areas
- Invasive Alien Plant Species
  - Rhododendron
  - Spanish/hybrid bluebell
- High Water Mark

**Data Sources:** Tailte Éireann



**Client**

**Dept. of Defence**

**Remediation of the former Irish Steelworks Factory Site**

**Title**

# Invasive Alien Plant Species Observed within Steelworks Site

TETRA TECH

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## Issue Details

**File Identifier:**
IE001330-TTI-00-XX-DR-G_AP0015

| Status: | Rev: | Model File Identifier: |
|---|---|---|
| S0 | P01 | |

| | | | |
|---|---|---|---|
| **Drawn:** | MK | **Date:** | 21/10/2026 |
| **Checked:** | RS | **Scale:** | 1:4,500 (A3 ) |
| **Approved:** | AE | **Projection:** | IRENET95 Irish Transverse Mercator |

**NOTE:**

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## 4.4 Species

### 4.4.1 Otter

Otter (*Lutra lutra*) is an Annex II species that occurs throughout Ireland, including within Cork Harbour, with populations found along rivers, lakes, and coasts, where fish and other prey are abundant, and where the bank-side habitat offers plenty of cover (NPWS, 2025). They have diverse habitat preferences: lakes, canals, riverine (streams up to major river systems) marshland and estuaries. Otters are a mobile species and maintain territories. In lowland rivers and fish-rich lakes otters only need to maintain small territories (up to 6km), but along smaller river systems and in upland areas where prey may be less abundant, otter territories can stretch to 20 km (Mullen et al., 2021). Female territories range between 7.5 ± 1.5 km for riverine and 6.5 ± 1.0 km for coastal environments, whereas male territories are approximately 13.2 ± 5.3 km along rivers but with a high degree of variability (Reid et al., 2013). In general, otters exploit a narrow strip of habitat, about 10 m wide at the aquatic-terrestrial interface (Mullen et al., 2021). The most recent Article 17 conservation assessment for otters in Ireland deemed the species as being in favourable conservation status (NPWS, 2025b).

Otters are opportunistic predators with a broad and varied diet. In freshwater areas a variety of fish from sticklebacks to salmon and eels will be taken, while crayfish and frogs can be important locally or seasonally. (Mullen et al., 2021). The nearest EU site designated for otter to the MUL Area is River Blackwater River (Cork/Waterford) SAC which is 21 km north as the crow flies from the MUL Area.

A desk-based study utilising records from NBDC (2026a) indicated that there have been no otter sightings within the MUL Area within the last 10 years. The closest otter sighting was recorded at Glenbrook, Co. Cork in 2022, 2 km northwest of the MUL Area and off Camden Pier in Crosshaven, Co. Cork, 3 km southeast of the MUL Area in 2018.

A site visit was conducted on 26/08/2026 to identify the potential for otter activity within the site boundary and MUL Area. The results of the survey concluded that no evidence of otter was noted within the Steelworks site boundary or MUL Area. The site was noted as an industrial site with a highly modified shoreline.

### 4.4.2 Marine Mammals

Ireland supports a great diversity and abundance of marine mammals, including the following species listed on Annex II of the Habitats Directive: bottlenose dolphin (T*ursiops truncatus)*, harbour porpoise (*Phocoena phocoena*), common dolphin, harbour seal (*Phoca vitulina*) and grey seal (*Halichoerus grypus*). The desk study set out to establish presence and abundance of marine mammal species within Cork Harbour. As the proposed SI works will be confined to the ISPAT area (of which the MUL Area is confined) and is wholly on land, there is no potential for interaction with marine mammals who spend their entire lifecycle in water i.e. harbour porpoise, dolphin or whale species. However, pinniped

species (i.e. grey and harbour seals) regularly haul out onshore for breeding and resting. Therefore, these species will be considered in more detail below.

#### 4.4.2.1 Grey Seal

Grey seal is the larger of the two pinniped species which occur around the Irish coast. They are primarily pelagic or demersal in their feeding habits and can be wide-ranging. In Ireland they are generally considered part of a larger population or meta-population that also inhabits adjacent jurisdictions (i.e. the UK and France) (NPWS, 2025). The habitat used by grey seals in Ireland is diverse and dynamic, from coastal and estuarine waters close to human activity and undisturbed offshore islands, to deeper Atlantic shelf waters and shallow seas shared with adjacent member states (Cronin et al., 2013). The key prey species for grey seal include a number of clupeids (e.g., herring), gadoids (e.g., cod, whiting), salmon, flatfish, and sand eels.

There are 10 SACs in Ireland for which grey seal is a QI. The nearest EU site designated for grey seal in Irish waters that was considered to have a potential pathway of connectivity to the MUL Area is Roaringwater Bay and Islands SAC 110 km by sea from the MUL Area. Grey seal has a ‘Favourable’ conservation status with an increasing trend in Irish waters (NPWS, 2025).

A desk-based study utilising records from NBDC (2026b) indicated that grey seal have not been sighted within the MUL Area in the last 10 years but has been observed in marine habitats adjacent to the MUL Area. 14 observations of live grey seal were recorded within Cork Harbour. One sighting was recorded on Luc Strand in Ringaskiddy, Co. Cork in 2018 (2 km south of the MUL Area). One observation was recorded at Saleen Creek in 2020 (8 km east of the MUL Area) and 11 sightings were recorded between 2021 and 2023 at Roches Point (6 km south of the MUL Area). Based on tracking data, grey seals typically forage within 100 km of an SAC (Carter et al., 2020).

#### 4.4.2.2 Harbour Seal

Harbour seal is the smaller of the two species of pinniped found in Ireland. They occur in estuarine, coastal, and fully marine areas, and breed in small groups scattered along the coastline. Harbour seals tend to forage within a maximum of 40 or 50 km of their haul-out sites, but most foraging trips tend to be within shorter ranges (Carter et al., 2020). The key prey species for harbour seals are similar to that of grey seal, including clupeids (e.g., herring), gadoids (e.g., cod, whiting), salmon, flatfish, and sand eels.

Harbour seals have been assessed as having a ‘Favourable’ conservation status in Irish waters and there are 13 SACs in Ireland for which this species is a QI (NPWS, 2025). The nearest SAC designated for harbour seal that was considered to have a potential pathway of connectivity to the MUL Area is the Kenmare River SAC located 88 km west as the crow flies of the MUL Area.

A desk-based study utilising records from NBDC (2026c) indicated that while harbour seals were not recorded within the MUL Area, they have been sighted in the last 10 years in the

marine waters adjacent to the MUL Area within Cork Harbour. There have been 15 harbour seals recorded within Cork Harbour since October 2016. The closest recorded sighting of harbour seal within Cork Harbour was one sighting in 2019 and 2023, 3 km from the MUL Area off Fort Davis in Carlislefort Co. Cork and at Cuskinny beach in Cobh. Further sightings have been recorded beyond Cork Harbour in the Belvelley Channel between 2022 and 2024, 5 km north of the MUL Area as the crow flies.

### 4.4.3 Migratory Fish Species

The MUL Area is not located within any SACs designated for Annex II diadromous fish species (which migrate between the sea and fresh water). These fish species have the potential to pass through estuarine areas during certain times in their life cycle. This may occur during upstream or downstream migrations to and from spawning grounds. The nearest SAC designated for migratory fish species that was considered to have a potential pathway of connectivity to the MUL Area is the River Blackwater River (Cork/Waterford) SAC located 46 km east of the MUL Area by sea. Atlantic salmon, sea and river lamprey are protected under EU legislation via Annex II of the Habitats Directive, with salmon offered protection under Annex II when in freshwater only. Brook lamprey (*Lampetra planeri*), which is also a designated Annex II species in River Blackwater River (Cork/Waterford) SAC, is not considered in this SISAA report as brook lamprey is not a diadromous fish species (i.e. it is confined to the freshwater section of the river and does not migrate to the marine environment). Thus, there is no potential for connectivity with the MUL Area.

### 4.4.4 Birds

There are a number of bird species recorded for grid square W76X (within which the MUL Area is located) via the National Biodiversity Data Centre (NBDC) (2026) database in the last 10 years. To refine search results and provide a more accurate representative of bird species likely to be present, a 1 km polygon was drawn around the MUL Area and a list of species was generated on the NBDC database. As shown in Table 4-1, 10 protected bird species were noted in the data search (NBDC), of which two were Annex I (Birds Directive), and seven were Special Conservation Interests (SCIs) of SPAs including Cork Harbour SPA, Ballycotton Bay SPA and the Seas off Wexford SPA. Seven species were listed as amber, two were red and one unknown Birds of Conservation Concern in Ireland (BoCCI) species, respectively.

## Table 4-1: Protected Bird Species Returned from the NBDC Data Search

| Common Name *Scientific Name* | Date of Last Record | Designation (or closest SPA where SCI protected) | | | | | |
|---|---|---|---|---|---|---|---|
| | | Annex I | SCI of Cork Harbour SPA | SCI of North-west Irish Sea SPA | SCI of Seas off Wexford SPA | SCI of Ballycotton Bay SPA | BOCCI[1] |
| Black-headed Gull (*Chroicocephalus ridibundus*) | 07/08/24 | No | Yes | Yes | Yes | No | Red |
| Common Gull (*Larus canus*) | 07/08/24 | No | Yes | Yes | No | Yes | Amber |
| Common Tern (*Sterna hirundo*) | 01/08/19 | Yes | Yes | Yes | Yes | No | Amber |
| Cormorant (*Phalacrocorax carbo*) | 02/01/23 | No | Yes | Yes | Yes | No | Amber |
| Curlew (*Numenius arquata*) | 07/08/24 | No | Yes | No | No | Yes | Red |
| Great Black-backed Gull (*Larus marinus*) | 07/08/24 | No | No | Yes | No | No | Amber |
| Grey Heron (*Ardea cinerea*) | 07/08/24 | No | Yes | No | No | No | Unknown |
| Mediterranean Gull (*Larus melanocephalus*) | 07/08/24 | Yes | No | No | Yes | No | Amber |
| Oystercatcher (*Haematopus ostralegus*) | 01/08/19 | No | Yes | No | No | No | Amber |
| Ringed Plover (*Charadrius hiaticula*) | 06/06/19 | No | No | No | No | Yes | Amber |

[1] https://www.npws.ie/sites/default/files/publications/pdf/IWM116_Checklists_Protected_and_Threatened_Species_Version_4.0_16June2025.xlsx accessed October 2026

The MUL Area does not spatially overlap with any SPA designated for wintering waterbirds or seabirds. At its closest point the MUL Area is 1.43 km from the boundary of the Cork Harbour SPA (004030) (designated for wintering waterbirds, passage waders in autumn and breeding common tern), the closest SPA that was considered to have a potential pathway of connectivity to the MUL Area. Cork Harbour is a large, sheltered bay system. The SPA site comprises most of the main intertidal areas of Cork Harbour, due to the sheltered conditions, the intertidal flats are often muddy in character (NPWS, 2015a). Cork Harbour is an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterfowl. Saltmarshes are scattered through the site and these provide high tide roosts for the birds. Rostellan Lake is a small brackish lake that is used by swans throughout the winter. The site also includes some marginal wet grassland areas used by feeding and roosting birds (NPWS, 2015a).

The North-west Irish Sea cSPA (004236) is 222 km northeast of the MUL Area and is the closest SPA that was considered to have a potential pathway of connectivity to the MUL Area designated for Great Black-backed Gull (*Larus marinus*), an SCI species recorded within the NBDC search. Due to the intervening distance and the mean max foraging range of 18.5 km for great black-backed gull (Woodward et al., 2019), it is concluded that there is unlikely to be a meaningful connection to this SPA.

The Seas off Wexford SPA (004237) is 89 km east of the MUL Area and is the closest SPA that was considered to have a potential pathway of connectivity to the MUL Area designated for Mediterranean Gull (*Larus melanocephalus*). According to Woodward et al (2019), Mediterranean gull has a mean max foraging range of 20 km. It is concluded that there is unlikely to be a meaningful connection to this SPA.

Ballycotton Bay SPA (004022) is 18 km east of the MUL Area is an east-facing coastal complex, designated for winter waterbirds and waders and is the closest SPA that was considered to have a potential pathway of connectivity to the MUL Area. The principal habitat within the site is inter-tidal sand and mudflats which provide the main feeding habitat for the wintering bird species of which Ringed Plover (*Charadrius hiaticula*) was identified within the NBDC search.

# 5 Identification of Relevant European Sites

## 5.1 Assessment of Connectivity

Connectivity is identified via the S-P-R model which identifies the potential impact pathways such as land, air, hydrological pathways etc. which may support direct or indirect connectivity between the SI works (source) and European sites and their QIs or SCIs (receptors).

Where it is evident that there is no connectivity between the SI work and receptors (i.e., European sites and/or habitats and species for which the sites are selected), the receptors are excluded from the AA process. Where connectivity exists between the SI works and receptors, these receptors are taken forward to the assessment of likely significant effects (**Section 6.2**).

When assessing impact, the QI and SCI habitats and species are only considered receptors where a credible or tangible S-P-R link exists between the SI works and the receptor. In order for an impact to occur there must be a risk initiated by having a ‘source’ - the origin of potential impacts (e.g., near stream construction works), an impact pathway - the means by which the effect reaches the receptor (air, water, or ground) between the source and the receptor (e.g., a watercourse which connects the development site to the site designated for the protection of a receptor) and a 'receptor' (e.g. a protected species associated aquatic or riparian habitats). If the source, pathway, or receptor is absent, no linkage exists and thus, there will be no potential for an impact to be transmitted.

## 5.2 Source-Pathway-Receptor Assessment

### 5.2.1 Source of Impact

Identification of a risk of impact does not constitute a prediction that it will occur or, in the event that it does occur, that there is an intrinsic likelihood that it will result in ecological or environmental damage or that it will cause or create a significant effect on the European sites in question. The level and significance of the effect depend upon the magnitude, duration or intensity of the impacts ensuing from the proposal and the existence of a credible or tangible S-P-R link between the SI works and the aforementioned European sites. It is also determined by the extent of the exposure to the risk and the characteristics of the receptor.

### 5.2.2 Impacts and Receptors Scoped out of Assessment

**Habitat loss, alteration and/ or fragmentation:** As stated above, the MUL Area does not overlap any SACs designated for Annex I habitats. The closest SAC designated for Annex I habitats is Great Island Channel SAC, located 4 km north of the MUL Area. As there will be no intrusive/extractive sampling associated with the SI works within the Great Island Channel SAC, there is no potential for habitat loss, alteration and/ or fragmentation effects to the QIs of the SAC. Therefore, there will be no interaction with the Annex I habitats of

Great Island Channel SAC and the proposed SI works, therefore this SAC is not assessed further. Other nearby SAC's which are designated for Annex I habitats but do not overlap the MUL Area include Ballymacoda (Clonpriest and Pillmore) SAC and Courtmacsherry Estuary SAC between 25 km and 32 km from the MUL Area. There is no SPR link between the proposed SI works and these SACs. Therefore, no other SAC with Annex I habitat QIs will be assessed further.

**Water quality (incl. suspended sediment concentration and accidental pollution):** No trial pits or boreholes will be located within 20 m of the quay walls and in the case of any downgradient active work zones, silt fences will be installed as standard, therefore there will be no potential for any sediment run-off or accidental pollution event to reach the marine environment.

**Introduction of invasive alien species:** An IAPS survey was conducted in April 2025 and identified two scheduled species: Spanish/hybrid bluebell and Rhododendron. One record of Spanish/hybrid bluebell was located within MUL Area B. However, the MUL Area does not overlap any SAC designated for Annex I habitats and all works will be conducted on reclaimed land. There is no pathway for hydrological connectivity between the proposed SI works and the closest SAC designated for Annex I habitats which is the Great Island Channel SAC 4 km away by sea.

**Above water noise, vibration and lighting (otters):** The desk study found no evidence of otter activity within the MUL Area . A site visit was also conducted on 26/08/2026 which did not identify any evidence of otter within the Steelworks site or the MUL Area. The site is a heavily industrialised area with existing high levels of baseline activity with a highly modified shoreline. It is unlikely that the MUL Area represents a critical habitat utilised by otters.

The nearest SAC designated for otter is the Blackwater River (Cork/Waterford) SAC (over 20 km north of the MUL Area as the crow flies). Otters from this SAC will not be foraging within the MUL Area in numbers that would lead to significant effects in light of the conservation objectives (e.g. the extent and number of habitats and ability of otter to access habitats, etc). Based on the lack of evidence of otter within the MUL Area, the distance to the closest otter SAC and the degraded environment of the overall site coupled with the limited size, scale and duration (20 trial pits, 6 boreholes over a staggered programme of seven months across five years), it is concluded that there is no credible S-P-R link to any SAC designated for otter and therefore otters are not considered further in this assessment.

**Above water noise, vibration and lighting (seals):** The proposed SI works does not spatially overlap with any European site designated for grey or harbour seal. No SACs designated for grey or harbour seals are within 100 km by sea from the MUL Area.

The closest SAC designated for grey seal is the Roaringwater Bay and Islands SAC (000101), 110 km by sea from the MUL Area. The closest SAC designated for harbour seal is Kenmare River SAC (002158), 148 km from the MUL Area by sea. As stated in **Section 4.4.2.1 and 4.4.2.2**, grey and harbour seals have been recorded in low numbers within Cork Harbour while none have been recorded hauled out within the MUL Area. Based on

the site visit conducted on 26/08/2026, the entirety of the MUL Area shoreline is unsuitable for seal haul-out and resting behaviour. The shoreline has been extensively modified and is characterised predominantly by vertical wall faces located approximately 4 m or more above spring tide level. While the eastern portion of Haulbowline Island, situated a minimum of 250 m from the MUL Area, comprises rocky shoreline habitat, its suitability for seal haul-out is limited by the high levels of disturbance associated with its use as a recreational walking route, including frequent pedestrian and bicycle traffic. Consequently, as suitable haul-out habitat is largely absent within and adjacent to the MUL Area, the potential for impacts on QI seal species arising from visual and above water noise disturbance is considered to be low. Therefore, it is reasonable to conclude that while grey and harbour seals may utilise the Cork Harbour for commuting or foraging, the harbour does not represent a critical habitat for these species. The proposed SI works will be conducted wholly on land with no marine works. There is no credible S-P-R link to any SAC designated for seals and therefore seals are not considered further in this assessment.

**Underwater Noise impacts (marine mammals):** An assessment was conducted to analyse the potential for underwater noise impacts to be emitted into the marine environment due to the land-based SI works (report ref: IE001330-TT-EN-XX-RP-Z-0009). The indicative SI works nearest the water are at a range of c. 20 m to the water (southernmost sampling points). These locations were used to estimate the worst-case noise levels. It is noted that none of the sound reaching the water will be of impulsive character. Therefore, depending on the precise soil conditions present there will be various transitions between the soil, made ground and concrete associated with the coastal defence and road foundations. The assessment concluded that all in-water noise levels from the SI works are below the thresholds for auditory injury and temporary threshold shift (TTS) for all marine mammal species. The anticipated noise will be similar in character to vessel noise (typically 150-180 dB SPL), at or below exiting noise levels in the area, and therefore unlikely to elicit any behavioural responses. Therefore, the noise contribution to the surrounding water will be negligible. There is no credible S-P-R link to any SAC designated for marine mammals and therefore marine mammals are not considered further in this assessment.

**Underwater noise impacts (fish):** As stated in **Section 4.4.3**, the closest SAC designated for migratory fish species is River Blackwater River (Cork/Waterford) SAC, located 46 km east of the MUL Area by sea. The SI works will be undertaken wholly on land. As outlined above for marine mammals, for SI works undertaken within 20 m of the marine environment, there will be only a negligible noise contribution to the surrounding water. Therefore, given the intervening distance between the MUL Area and the closest SAC for migratory fish species, and the lack of impact pathway for underwater noise, there is no credible S-P-R link to any SAC designated for migratory fish and therefore fish SACs are not considered further in this assessment.

### 5.2.3 Impacts Scoped in for Assessment

**Table 5-1** identifies the potential impacts arising from the SI works, the element of SI works associated with each impact, a description of effect pathway and the receptors with the potential to be affected. This assessment will then be used to identify relevant European sites and SCIs to be taken forward to the Stage 1 Screening for Appropriate Assessment. Identification of relevant European sites and QIs is presented in **Section 5.3.1**, with **Table 5-2** summarising all sites taken forward for screening.

**Table 5-1: Source-Pathway-Receptor Assessment for the SI Works**

| Impact | Potential source of impact | Description of Effect Pathway | Relevant Receptors |
|---|---|---|---|
| Above water noise, vibration and lighting | Presence of machinery, human presence and use of equipment during SI works | Potential for disturbance to species, leading to displacement from the area. | Birds |

## 5.3 Identification of Relevant European Sites

The following sections detail the identification of relevant European sites for consideration in the Stage 1 Screening for Appropriate Assessment, which is based on an S-P-R model of assessment.

European sites identified within the overall zone of influence of the SI works, their respective relevant QI/ SCI, and a measure of the distance of the European site from the MUL Area are shown in **Figure 5-1** and detailed in **Table 5-2**.

### 5.3.1 Birds

The European sites with relevant bird SCIs to be considered in this SISAA are:

- All European sites that physically overlap with the MUL Area; and,
- All European sites that have bird species as a SCI that have a realistic potential for connectivity with the MUL Area (i.e., in close proximity to the SI works or that were identified within the MUL through desk-based research). Wintering swan and goose species can have foraging ranges of up to 20 km from their night roosts (SNH, 2016). Given this ex-situ potential, it is possible that swan or goose species may occur in the vicinity of the SI works associated with SPAs located up to 20 km away. No swan or goose SPAs were identified within 20 km of the SPA. Therefore, SPAs which had SCI species recorded within the MUL Area in the last 10 years were considered in this SISAA.

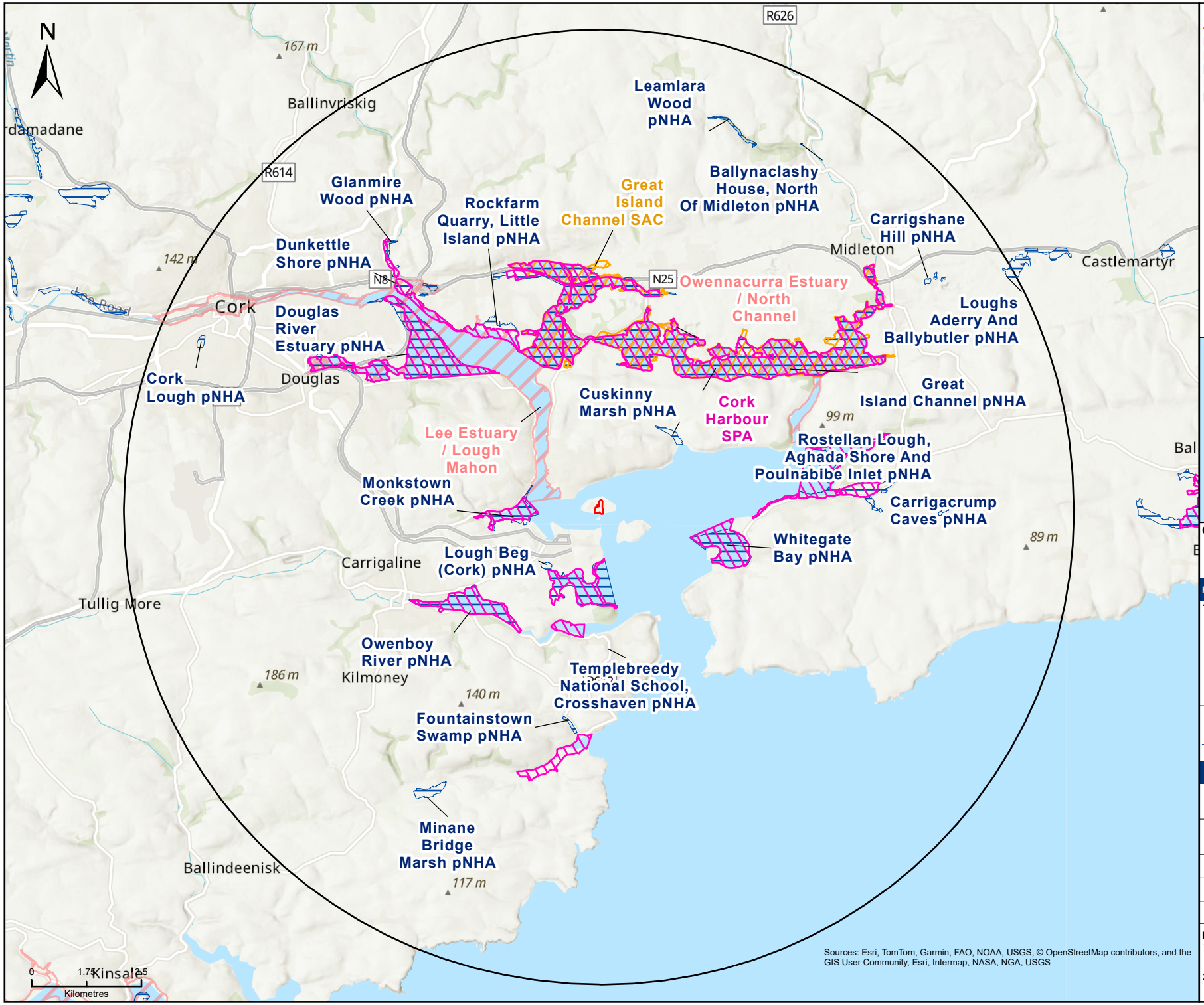
As stated in **Section 4.4.4**, 10 bird species were identified as having been recorded within 1 km of the MUL Area. These species are designated as SCIs, with the closest SPAs designated for these species as follows: two wintering bird SPAs (Cork Harbour SPA and Ballycotton Bay SPA), and two seabird SPAs (North-west Irish Sea SPA and Sea off Wexford SPA). Cork Harbour supports nationally important wintering populations of 22

species, as well as a nationally important breeding colony of common tern (*Sterna hirundo*). As the proposed SI works are 1.43 km at their closest point to the proposed SI works and as SCIs of Cork Harbour SPA have been recorded within the MUL Area. This SPA and associated SCI's will be considered in more detail below.

Ballycotton Bay SPA is designated for wintering waterbirds such as teal (*Anas crecca*), ringed plover, golden plover (*Pluvialis apricaria*), grey plover (*Pluvialis squatarola*), Lapwing, black-tailed godwit (*Limosa limosa*), bar-tailed godwit (*Limosa lapponica*), curlew, turnstone, common gull and lesser black-backed gull (*Larus fuscus*) (NPWS, 2014). Ringed plover was identified through desk-based research as being recorded within the MUL Area and is therefore the only species considered in this assessment. Ringed plover exhibits high site fidelity and are considered to be reliant or totally reliant on the SPA site and unlikely to utilise alternative habitats in surrounding areas (NPWS, 2014). Therefore, it is highly unlikely that this species would travel 18 km inland to the MUL Area for foraging or roosting given the more suitable habitat available within range of the SPA. Given the distance between the proposed SI works within Cork Harbour (18 km) and the foraging/commuting ranges of ringed plover of Ballycotton Bay SPA including their habitat preferences. It is unlikely that those species will be present within the MUL Area in numbers which could impact on their conservation status. Given the nature, scale duration and location of the proposed SI works on Haulbowline Island, and that more suitable habitat is available within range of the Ballycotton Bay SPA, ringed plover of Ballycotton Bay SPA is not considered further in this SISAA.

Seabirds can forage considerable distances from their colonies with species such as Manx shearwater, storm petrel, gannet and fulmar capable of foraging hundreds of kilometres away (Woodward et al., 2019). As outlined previously in **Section 4.4.4**, black-headed gull and Mediterranean gull were identified within desktop study as having been recorded within 1 km of the MUL Area. The closest SPAs designated for those SCI species are 89 km (Seas off Wexford SPA; Mediterranean gull) and 222 km (North-west Irish Sea SPA; great black cacked gull) from the MUL Area), while mean max foraging distances are 20 km for Mediterranean gull and 73 km for great black backed gull and (Woodward et al., 2019). Therefore as the MUL Area is located further than the mean max foraging distances from the seabird SPAs identified above, with more suitable habitats within range of these SPAs, it is highly unlikely black-headed or Mediterranean gull utilises the MUL Area in numbers which may impact their conservation condition. Therefore, black-headed gull of the North-west Irish Sea SAP and Mediterranean gull of the Seas off Wexford SPA are not considered further in this assessment.

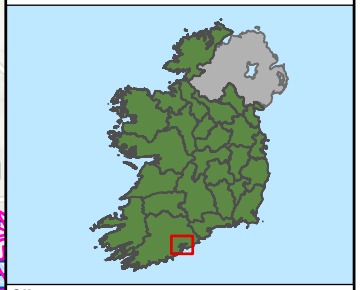
In summary, the site selected for consideration of bird species SCI in this SISAA is Cork Harbour SPA.




Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Esri, Intermap, NASA, NGA, USGS

**Legend**

- SITE BOUNDARY
- SPECIAL PROTECTION AREA (SPA)
- SPECIAL AREAS OF CONSERVATION (SAC)
- PROPOSED NATURAL HERITAGE AREAS (PNHA)
- NUTRIENT SENSITIVE AREAS
- 15 KM BUFFER OF SITE BOUNDARY



**Client**

**Irish Defence Forces**

**Remediation of the former Irish Steelworks Factory Site**

**Title**

**Protected and Designated Sites Map**


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**Issue Details**

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| Status: | Rev: | Model File Identifier: | |
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| S0 | P01 | | |
| Drawn: MK | | Date: | 03/03/2026 |
| Checked: PC | | Scale: | 1:160,000 (A4) |
| Approved: PC | | Projection: | IRENET95 Irish Transverse Mercator |

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**Table 5-2: Relevant European Sites and Qualifying Interests to be Considered in Stage 1 Screening for Likely Significant Effects**

| European Site (Code) | Distance from the MUL Area (km) | List of Relevant Qualifying Interests[2] | Connections (Source-Pathway Receptors) |
|---|---|---|---|
| Cork Harbour SPA (004030) | 1.43 | Little Grebe (*Tachybaptus ruficollis*) [A004]<br>Great Crested Grebe (*Podiceps cristatus*) [A005]<br>Cormorant (*Phalacrocorax carbo)* [A017]<br>Grey Heron (*Ardea cinerea*) [A028]<br>Shelduck (*Tadorna tadorna*) [A048]<br>Teal (*Anas crecca*) [A052]<br>Pintail (*Anas acuta*) [A054]<br>Red-breasted Merganser (*Mergus serrator*) [A069]<br>Oystercatcher (*Haematopus ostralegus*) [A130]<br>Golden Plover (*Pluvialis apricaria*) [A140]<br>Grey Plover (*Pluvialis squatarola*) [A141]<br>Lapwing (*Vanellus vanellus*) [A142]<br>Dunlin (*Calidris alpina)* [A149]<br>Black-tailed Godwit (*Limosa limosa*) [A156]<br>Bar-tailed Godwit (*Limosa lapponica*) [A157]<br>Curlew (*Numenius arquata*) [A160]<br>Redshank (*Tringa totanus*) [A162]<br>Black-headed Gull (*Chroicocephalus ridibundus*) [A179]<br>Common Gull (*Larus canus*) [A182]<br>Lesser Black-backed Gull (*Larus fuscus*) [A183]<br>Common Tern (*Sterna hirundo*) [A193]<br>Wigeon (*Mareca penelope*) [A855]<br>Shoveler (*Spatula clypeata*) [A857]<br>Wetland and Waterbirds [A999] | Above water noise, vibration and lighting to ex situ birds utilising the MUL Area |

## 5.4 Conservation Objectives

The integrity of a European site (referred to in Article 6(3) of the EU Habitats Directive) is determined based on the conservation status of the QI of these sites.

European and national legislation places a collective obligation on Ireland to maintain at favourable conservation status areas designated as SAC and SPA. The government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

Favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range are stable or increasing;

[2] Qualifying Interests that have not been identified as relevant to this assessment are greyed out.

- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- The conservation status of its typical species is favourable;

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The specific conservation objectives for each European site in Ireland are available on www.npws.ie.

# 6 Supporting Information for Screening for Appropriate Assessment

## 6.1 Management of European Sites

The SI works are not directly connected with or necessary to the management of any European site(s).

## 6.2 Assessment of Likely Significant Impacts

This section determines whether the impacts identified in **Section 5.2.1** could have significant effects on the QI or SCIs of the European sites identified in **Section 5.3** in view of the conservation objectives of the sites.

### 6.2.1 Birds

This section assesses the likelihood of significant effects on those SPAs where there is potential for connectivity with the MUL Area and the proposed SI works. The assessment is based on the precautionary principle and has been undertaken in the absence of mitigation.

The S-P-R assessment (**Table 5-1**) outlined the following potential sources of impacts to birds as a result of the SI works:

- Above water noise, vibration and lighting.

Relevant SPAs and QI bird species have been listed in **Table 5-2**. The following sections assess the likelihood for significant effects to these SPAs and species and summarise the screening for relevant European sites.

#### 6.2.1.1 Above Water Noise, Vibration and Lighting

SI works activities with the potential to interact with ex situ SCI bird species using the MUL Area are as follows:

- Ground investigation works (Trial pit, borehole drilling and SPT).
- Geophysical survey (GPR).

The MUL Area at its closest point is 1.43 km from the Cork Harbour SPA (designated for wintering waterbirds and passage waders in autumn and colonies of breeding common tern (*Sterna hirundo*). Waterbirds of this SPA utilise the large wetland habitat (2,587 ha) throughout the SPA for roosting and foraging. These bird species are ecologically dependent on wetlands (Ramsar Convention, 1971) with the majority of wading birds foraging across exposed tidal flats (NPWS, 2014). Species such as lapwing and golden plover are considered to be ‘terrestrial waders,’ typically foraging across grassland and using tidal flats primarily for roosting. When tidal flats are covered at high water, intertidally foraging waterbirds are excluded and many will move to nearby fields to feed (NPWS, 2014). Black-tailed godwit also forages across intertidal mudflats and grassland habitats.

According to NPWS (2014), the principal supporting habitats for all SCI bird species of Cork Harbour SPA are intertidal or subtidal mud/sand flats or sheltered and shallow subtidal and lagoons. Breeding common tern are known to nest and breed on purpose built nesting pontoons which are non-stationary within Cork Harbour and also on derelict steel barges and the roof of Martello Tower (NPWS, 2015a). The Pork of Cork deploys the artificial pontoons for the duration of the breeding season and are moved 50 m eastward annually to allow for improved habituation of the terms to their environment. At its closest point, MUL Area B is 725 m northeast of the artificial pontoons which are located off Ringaskiddy Deepwater Berth. Haulbowline Island is a highly modified terrestrial habitat previously in use by a manufacturing steel factory, with a baseline level of noise and activity, the MUL Area is wholly on reclaimed land which contains no habitats suitable to support the SCI species of Cork Harbour SPA. Therefore, given the distance between the SI works on Haulbowline Island which are located over 700 m from the nearest pontoon, the potential airborne noise produced by the SI works which between would a predicted noise level of less than 56 dB (which would elicit low to moderate responses) coupled with the high levels of disturbance associated with commercial ships and other vessels in Cork Harbour which are in closer proximity to the pontoons, there is no potential for impact from the SI works on breeding common terns within Cork Harbour SPA.

The land-based geophysical survey will involve a small team of surveyors walking within the MUL Area and site boundary using non-intrusive hand-held equipment such as pole-mounted devices for ground penetrating radar surveys. Given the industrialised nature of the MUL Area and surrounding environs, these surveys will not produce any noise above background levels of activity.

Geotechnical sampling (trial pit, borehole drilling and SPT) will introduce airborne noise and vibration to any birds that may utilise the MUL Area. The proposed SI works will involve the use of tracked plant machinery, personnel and lighting at GI locations and adjacent areas. Therefore, there is potential for disturbance to SCI bird species (including breeding common tern) of Cork Harbour SPA if they are found within the MUL Area during the proposed SI works. However, the closest SI location is TP329, 1.43 km north of the SPA. This SI location is directly adjacent to the road which runs around the island for vehicles, freight or other machinery required, a source of regular residual noise and located within a busy industrialised environment. As well as relatively high baseline levels of noise, there is little in terms of supporting habitat for wintering birds to forage or roost within proximity to these works, as stated above. Therefore, no impact pathway has been identified for above-water noise related disturbance, which could lead to reductions in ability of wintering bird populations to forage or roost.

It has been shown that only sudden, extremely loud noises (>70 dB) have sufficient “startling power” to drive birds away for a significant amount of time (Spectrum Acoustic Consultants, 2012). Spectrum Acoustic Consultant’s study was carried out during drilling operations, which was found to have a maximum volume of 58 dB at a distance of 50 m. Sudden loud noises (or impulsive noises) tend to have the most significant impact on

waterfowl species since they do not habituate to it in the same way as background ambient noise. Research suggests that birds may habituate to ambient noise below 70dB(A), whereas sudden irregular noises of above 50dB(A) may result in some level of disturbance (Cutts et al., 2008). The Estuarine & Coastal Studies (IECS) report (Cutts et al., 2008) observed the effects of disturbance on the bird population via observations of flight responses and or behavioural changes. With respect to specific noise levels the following response descriptors are given within the IECS report:

- Noise below 50 dB – low
- Regular noise 50 – 70 dB – low to moderate
- Irregular noise 50 – 70 dB – moderate
- Regular piling noise below 70 dB – moderate
- Irregular piling noise above 70 dB – moderate to high.

An airborne noise assessment was carried out to support this MUL Application (Report Ref: IE001330-TT-EN-XX-RP-Z-0009). The assessment was undertaken in accordance with ISO 9613-2:2024 Acoustics – Attenuation of sound during propagation outdoors – Part 2: Engineering method for the prediction of sound pressure levels outdoors. This assessment assumed the worst-case scenario that trial pit excavations, borehole drilling and SPT will be undertaken simultaneously and in close proximity to each other. The key findings of the assessment concluded that within 100 m of the proposed SI activities predicted noise levels would be 70 dB which could result in a moderate response. At 1 km away, the noise levels are predicted to be 50 dB, resulting in a low response (**Table 6-1**).

**Table 6-1: Predicted Noise Levels for Site Investigation Works**

| Combined Sound Power Level | Predicted Noise Level, $L_{Aeq}$ (dB) at Various Distances | | | | |
|---|---|---|---|---|---|
| | 100 m | 200 m | 500 m | 1000 m | 1500 m |
| SI Works (118 dB $L_{wA}$) | 70 | 64 | 56 | 50 | 47 |

In summary, the MUL Area is not within an area of suitable habitat for SCI species of Cork Harbour SPA and is located at its closest 1.43 km from the MUL Area. The proposed SI works will be undertaken on Haulbowline Island an already industrialised and busy environment where a baseline of noisy activity already exists. The MUL Area is also bounded by a road which supports regular use by DoD. The predicted airborne noise level associated with the SI activities will cause moderate disturbance within 100 m of the SI works and low disturbance within 1000 m and beyond (**Table 6-1**). Given the habitat preferences of the SCI species and that the MUL Area is located wholly on reclaimed land, it is highly unlikely the SCI species utilise the MUL Area for foraging or roosting in numbers that may impact their conservation status.

Therefore, taking into consideration the industrialised baseline environment, limited scale and temporary duration of the SI works coupled with the distance to Cork Harbour SPA, the predicted noise level disturbances, there will be no likely significant effects to ex situ SCI bird species of Cork Harbour SPA.

## 6.3 In-combination Impacts

Even if projects are unlikely to have significant effects on their own, the effects in-combination with those of other plans or projects could be significant. An in-combination screening assessment has been carried out to identify other projects/plans that could act in-combination with the SI works to affect site conservation objectives (in accordance with OPR, 2021).

MARA has identified the following key steps for assessing in-combination effects:

1. Defining the Cumulative Effects Spatial Scope (CESS);
2. Defining the Cumulative Effects Temporal Scope (CETS);
3. Impact identification;
4. Pathway identification;
5. Prediction;
6. Identification of Plans or Projects that could act in combination;
7. Screening Stage Cumulative Effects Assessment conclusion; and
8. Managing cumulative impacts - to be carried out as part of Stage 2 AA process.

### 6.3.1 Cumulative Effects Spatial Scope (CESS)

The CESS was based on the maximum impact range identified in this accompanying SISAA when considering impacts of the proposed SI works. Beyond this maximum distance, the proposed SI works will have no effect and therefore no potential pathway to cumulative effects with other projects. According to Cutts et al., (2009), observed effects of disturbance on the bird population via observations of flight responses and or behavioural changes is considered low below 50 dB (refer to **Table 6-1**). The maximum impact range identified for the SI works was therefore a highly conservative 1 km for above-water noise disturbance to bird species, therefore all projects and plans within 1 km of the MUL Area boundary are assessed with respect to the likelihood of significant effects.

### 6.3.2 Cumulative Effects Temporal Scope (CETS)

The CETS was based on the potential for temporal overlap with the proposed SI works. As the proposed SI will have a five-year licence, projects likely to take place within the next six years were identified as potentially relevant, allowing for a precautionary one-year buffer to allow for the time between submission of this MUL application and an MUL being granted.

### 6.3.3 Impact Identification

Potential impacts related to the proposed SI works are described in **Section 5.2.1** of this SISAA Report. The proposed SI works individually do not have the potential to give rise to likely significant effects, due to above-water disturbance. However, if other projects/plans were to carry out works at the same time as the proposed SI works then there may be potential for in-combination effects.

In order for other plans/ projects to act in-combination with the proposed SI works, they must also give rise to the above impacts.

### 6.3.4 Pathway Identification and Predication of Impacts

#### 6.3.4.1Above-water Disturbance

Above-water disturbance due to the presence of humans, equipment, noise, vibration and lighting have the potential to occur during the SI works. The SI works and related effects will be temporary and of relatively short duration which will be limited to within the MUL Area. Therefore, it is considered that only projects which also have the potential to cause above-water disturbance and which are likely to occur at the same time as the SI works and are within the MUL Area have the potential to act in-combination.

It is considered unlikely that high-level plans have the potential to contribute to above-water disturbance occurring at the same time and in the same place as the SI works.

### 6.3.5 Identification of Plans or Projects

Tetra Tech undertook a desk study using internet searches, planning databases and other available sources, as outlined below, to identify other plans, projects and activities likely to overlap with the CESS and CETS of the proposed SI works, which have the potential to give rise to in-combination effects.

#### 6.3.5.1Plans

Following the identification of likely pathways for in-combination impacts, it is considered that for a plan to be able to act in-combination with the proposed SI works, it must determine the precise location of a project or designate specific land uses. A review was undertaken of national, regional and local plans using planning portals and expert knowledge. The following plans were deemed relevant to the project:

- National Biodiversity Action Plan 2023-2030;
- River Basin Management Plan 2022-2027;
- Cork County Development Plan 2022-2028; and
- Port of Cork Masterplan 2050.

##### 6.3.5.1.1 National Biodiversity Action Plan 2023 – 2030

The National Biodiversity Action Plan (NBAP) is a framework for the conservation and protection of biodiversity in Ireland. The main objective of the plan is to conserve and

restore biodiversity and ecosystem services. The importance of conservation, the management of protected areas and species and the sustainable use of biodiversity has been identified as an action under several objectives in the NBAP. The objectives recognise the shared responsibility for the conservation of biodiversity and the sustainable use of its components, by all sectors. As the overall aim of the NBAP is to protect biodiversity and to continue and improve the transposition of the EU Habitats Directive and the EU Birds Directive into national legislation, there are no predicted in combination impacts from the NBAP 2023-2030 with the works.

#### 6.3.5.1.2 River Basin Management Plan 2022-2027

The River Basin Management Plan (RBMP) outlines the approach that Ireland will take to protect waters over the period to 2022-2027. As the overall aim of the RBMP is to protect and/or restore waters in Ireland, there are no predicted in-combination impacts from the RBMP with the works.

#### 6.3.5.1.3 Cork County Development Plan 2022 – 2028

Cork County Development Plan sets out the strategic approach and vision to meet the needs and aspirations for Cork County. The plan also sets out a number of strategies, policies and objectives for the protection of the natural environment and biodiversity, including:

- Protect all natural heritage sites which are designated or proposed for designation under European legislation, National legislation and International Agreements. Maintain and where possible enhance appropriate ecological linkages between these. This includes Special Areas of Conservation, Special Protection Areas, Marine Protected Areas, Natural Heritage Areas, proposed Natural Heritage Areas, Statutory Nature Reserves, Refuges for Fauna and Ramsar Sites. These sites are listed in Volume 2 of the Plan.
- Provide protection to species listed in the Flora Protection Order 2015, to Annexes of the Habitats and Birds Directives, and to animal species protected under the Wildlife Acts in accordance with relevant legal requirements
- Encourage, pursuant to Article 10 of the Habitats Directive, the protection and enhancement of features of the landscape, such as traditional field boundaries, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species.

The Plan was also subject to Strategic Environmental Assessment (SEA) and AA. With the incorporation of biodiversity objectives within the plan and the implementation of mitigation measures, it is considered highly unlikely that the effects of the development plan will act in combination with the works.

#### 6.3.5.1.4 Port of Cork Masterplan 2050

This Port of Cork Masterplan 2050 presents a vision of how the Port of Cork can adapt and grow from now through to 2050 to deliver on economic, environmental, and social

responsibilities for the region. The Masterplan states that 'there are two European sites located within the harbour (Great Island Channel SAC and Cork Harbour SPA), in addition to some pNHAs, most of which overlap with the European sites. This rich biodiversity resource is of significant importance to the harbour.' It is therefore considered highly unlikely that the effects of the development plan will act in combination with the works.

**There are no anticipated in-combination effects from plans and therefore plan-level in-combination effects are screened out from further assessment.**

### 6.3.5.2Projects

A search of foreshore licence and MUL applications/determinations which could interact with the SI works was conducted using the relevant consenting authority websites (DHLGH - foreshore applications, MARA - MULs, An Coimisiún Pleanála (ACP) - Strategic Infrastructure Development (SID) - marine developments, Environmental Protection Agency (EPA) – Dumping at Sea (DaS) permits).

#### 6.3.5.2.1 Dumping at Sea Permit (S0013-03) and foreshore licence FS007126

The Port of Cork Company's, AA screening determined that the activities associated with the DaS permit, located within the River Lee and Cork Estuary and those navigational areas within Cork Harbour, will not occur in isolation but occur as a series of shipping vessel movements in the operational berths and navigational areas of the Cork Harbour shipping lanes. Cork Harbour is an existing busy shipping lane and there is no possibility whatsoever that an additional ship will trigger behavioural changes or disturbance in the SCI waterbird population. The loading activities will simply be viewed as another ship in a place that ships regularly visit or transit. Common tern was considered with the potential to be impacted by above-water noise distance but as the breeding sites of these tern species are located at Ringaskiddy Deepwater Berth, they are already subject to high levels of disturbance associated with the movement of commercial ships and other vessels and were therefore screened out from further assessment (RPS, 2021). As the proposed SI works will be located wholly on land on Haulbowline Island, 100 m from the boundary of Cork Harbour SPA and given the baseline noise levels in the surrounding area, there is no potential for the proposed SI works to act in combination with S0013-03 to give rise to likely significant effects.

#### 6.3.5.2.2 Maritime Usage Licence Applications

No existing MUL applications overlap the proposed SI works.

**MUL230029** is directly adjacent to the MUL Area to the northeast. This MUL also under the DoD was granted on the 17/12/2025 for a period of eight years for the maintenance dredging of the entrance channel and the southern part of the Graving Dock on Haulbowline Island. MUL230029 determined that the project alone or in-combination would not result in adverse effect on the integrity for the Cork Harbour SPA SCIs due to visual and above water noise disturbance. Based on **Table 6-1**, the proposed SI activities will have a low to moderate predicted noise level which decreases beyond 1 km. Given the baseline

noise levels in the surrounding area, there is no potential for the proposed SI works to act in combination with MUL230029 to give rise to likely significant effects.

**MUL250024** is located 800 m west of the MUL Area and was determined on the 13/08/2026 for a period of three years to establish baseline environmental data to inform design and predict potential impacts and develop mitigation measures for the Port of Cork expansion project. MUL250024 concluded no potential for adverse effects on SCI bird species of Cork Harbour SPA due to above-water noise disturbance given the busy nature of Cork Harbour and shipping lane and the level of ambient noise already experienced at this site. However, given the close proximity of MUL250024 to the artificial breeding pontoons for common tern which are non-stationary within the Harbour, as part of their licence conditions, the licence holder must not undertake SI works within 200 m of Cork Harbour SPA or within 200 m of the artificial tern pontoons during 1st May to 1st August.

The proposed SI works are 1.43 km at their closest point from Cork Harbour SPA and over 700 m from the nearest common tern nesting pontoon. Based on **Table 6-1**, the proposed SI activities will emit a predicted noise level of between 50 to 56 dB at this distance, indicated a low to moderate level of disturbance to birds. Give that the proposed SI works will be located wholly on land on Haulbowline Island and that there is an existing baseline of industry and shipping in the wider region, there is no potential for the proposed SI works to act in combination with MUL250024 to give rise to likely significant effects.

**MUL260036 (Port of Cork Company)** is located 1 km west of the MUL Area and was determined on 01/10/2026, for a period of three years from the commencement date to support SI works to inform the design and assessment of any future Port of Cork projects in the area. The AA Screening carried out for MUL260036 concluded likely significant effects on SCI bird species of Cork Harbour due to above-water noise disturbance. As part of their proposed licence conditions, the licence holder must not undertake SI works within 200 m of Cork Harbour SPA or within 200 m of the artificial tern pontoons during 1st May to 1st August.

The proposed SI works are 1.43 km at their closest point from Cork Harbour SPA and 700 m from the nearest common tern nesting pontoon. Based on Table 6-1, the proposed SI activities will emit a predicted noise level of between 50 to 56 dB at this distance, indicated a low to moderate level of disturbance to birds. Give that the proposed SI works will be located wholly on land on Haulbowline Island and that there is an existing baseline of industry and shipping in the wider region, there is no potential for the proposed SI works to act in combination with MUL260036 to give rise to likely significant effects.

#### 6.3.5.2.3 Screening Stage In-combination Effects Assessment Conclusion

Based on the above review of other projects occurring within the CESS and CETS of the proposed SI works, there is no potential for any project or plan to act in combination and likely significant effects in-combination can be ruled out at this stage.

# 7 Summary and Conclusion

Tetra Tech has prepared this report to provide the necessary information to MARA for them to complete a Screening for Appropriate Assessment of the potential for likely significant effects on European sites, in view of their conservation objectives, arising from the SI works either individually or in combination with other plans or projects. The potential impacts of the SI works have been considered in the context of the European sites potentially affected, their QI/ SCI and their conservation objectives, through the application of the S-P-R model, which considered the potential extent of effects from the SI works and the potential in-combination effects with other plans or projects. Measures intended to avoid or reduce the harmful effects of the proposed development on European sites (i.e. “mitigation measures”) have not been taken into account in this SISAA.

The overall findings, as set out in this report to inform screening for AA, are that the works are not directly connected with or necessary to the management of a European Site and it can be excluded on the basis of objective scientific information that the works, individually or in combination with other plans or projects, will not have a likely significant effect on a European Site.

It is respectfully submitted that Appropriate Assessment (‘Stage 2’) is not required.

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# Appendix A List of Projects for In-combination Assessment

**Table A.1 List of projects identified following a search of the relevant databases undertaken of the 10/10/2026**

| No. | Application reference no. | Project | Approximate Distance from MUL Area (km) | Project Status | In-combination Effects Assessment |
|---|---|---|---|---|---|
| 1 | MUL230029 | Department of Defence maintenance dredging. | 0 | Determined 17/12/2025 for a period of eight years | MUL Area directly adjacent to project boundary to the northeast seaward side.<br>Possible temporal overlap. |
| 2 | S0013-03/ FS007126 | Port of Cork Company maintenance dredging. | 0.08 | Permit end date 31/12/2030. | No spatial overlap with MUL Area.<br>Within the Cumulative Effects Spatial Scope (CESS).<br>Possible temporal overlap. |
| 3 | MUL250024 | Port of Cork Company, to establish baseline environmental data, inform design, predict potential impacts and develop mitigation measures for the Port of Cork expansion project. | 0.80 | Determined 13/08/2026 for a period of three years | No spatial overlap with MUL Area.<br>Within the Cumulative Effects Spatial Scope (CESS).<br>Possible temporal overlap. |
| 4 | MUL260036 | Port of Cork Company<br>Marine environmental surveys for the purpose of site investigation or in support of an application under Part XXI of the Act of 2000. | 1 | Determined 01/10/2026 for a period of three years | No spatial overlap with MUL Area.<br>Within the Cumulative Effects Spatial Scope (CESS).<br>Possible temporal overlap. |