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1.0 **Introduction**

The following report is a summary of the main features of the proposed development, comprising of the upgrade of the existing landing slipway and pier at Dalkey Island. The report forms part of the Part 8 planning procedure. It summarises the information given in the associated drawings (Appendix A), the associated report on the proposed works (Appendix C) and the Appropriate Assessment Screening Statement (Appendix B).

2.0 **Site Location and General Information** (see drawings no. 2056-01, 13895-0001)

The site of the proposed development is located on the west coast of Dalkey Island approximately 300m offshore from Dalkey at the southern end of Dublin Bay separated from the mainland by Dalkey Sound. Dalkey Islands consisting of Dalkey Island, Lamb Island and Maiden Rock are designated as a Special Protection Area (SPA) for roosting tern species (Common, Artic & Roseate Tern). The islands, approximately 22 acres in size, are quite distinct from other park areas within the County as they retain a distinct character of “wildness”, coupled with significant levels of natural and archaeological heritage, and are notable for their marine life.

The site, outlined in red in drawing no. 2056-01, compromises part of Dalkey Island consisting of the slipway development works at the west coast of Dalkey Island. The proposed development - the subject of this Part 8 proposal - comprises of the upgrade of the existing slipway and pier. At present, it is very difficult for craft to access the island as the access channel is narrow and there is lack of water depth at low water spring tides, the pier construction is very poor, the deck level is low and previously placed mooring rings and handrails have corroded. The proposal for the upgrade of the slipway is described in detail in section 10 below.

3.0 **History and Context**

3.1 **Dalkey Island:**

dalkey Island has a long and interesting history much of which is a consequence of its close relationship to the nearby Dalkey Harbour (Coliemore) which was once the principal port serving the city of Dublin. Dalkey Island is a nationally and internationally important archaeological site, showing a history of 6000 years of human activity undisturbed by modern development and land-use pressures. Key visible archaeological field monuments include the mid 6th to 7th century promontory fort, St. Begnet’s church and associated rock-cut crosses, medieval field enclosures, and the 19th century Martello tower and Gun
Battery. The slipway, or Boat Harbour as it was depicted in the first edition of the 6” Ordinance Survey of County Dublin of 1829-41 is its earliest known existence.

The island was the focus of archaeological excavations from 1956-59 (Liversage 1968) in support of conservation works to St. Begnet’s Church, which uncovered a significant variety and quantity of artefacts from the Mesolithic to the medieval period through the excavation of approximately 5-10% of the settled area of the island. Buried archaeological features and deposits include late Mesolithic (c.4300 BC) to Early Bronze Age (c.2500 BC) shell middens and artefacts including Mesolithic Bann flakes, Neolithic hollow scrapers and leaf-shaped arrowheads, Bronze Age barbed and tanged arrowheads, and large amounts of Neolithic, Beaker and Bronze Age pottery. There is strong potential for submerged archaeological finds, features and deposits to the sub-littoral zone surrounding the islands.

4.0 Planning Context (see County Development Plan 2010 – 2016, Map inset no. 4)

4.1 Zoning:
Dalkey Island is zoned ‘G’ in the 2010-2016 Dun Laoghaire-Rathdown County Development Plan with the zoning objective: “To protect and improve high amenity areas”

4.2 Zone of Archaeological Potential:
Dalkey Island is deemed a zone of Archaeological Potential (DU – 023 – 029).

4.3 Protected Structures and Record of Monuments and Places:
The following structures located on Dalkey Island are listed in the Record of Protected Structures, Schedule 1, Appendix C of the 2010-2016 Dun Laoghaire-Rathdown County Development Plan;

- **Martello Tower** (RPS No. 1591)
- **Church** (RPS No. 1611)
  NOTE. This structure is the ruin of St. Begnet’s Church.

The following monuments and places located on Dalkey Island are listed in the Record of Monuments & Places, Schedule 2, Appendix C of the 2010-2016 Dun Laoghaire-Rathdown County Development Plan;

- **Promontory Fort** (RMP No. 023-029001)
  NOTE. May contain Protected Structure
- **Midden** (RMP No. 023-029002)
- **Church** (RMP No. 023-029003)
  NOTE. Status ‘O’ – In state ownership
- **Holy Well** (RMP No. 023-029004)
- **Cross Inscribed Stone** (RMP No. 023-029005)
NOTE. May contain Protected Structure

- **Burial Ground** (RMP No. 023-029006)
  NOTE. May contain Protected Structure

- **Field System** (RMP No. 023-029007)

- **Martello Tower** (RMP No. 023-029009)
  NOTE. May contain Protected Structure

- **Battery Wall** (RMP No. 023-029011)
  NOTE. May contain Protected Structure

### 4.4 Special Protection Area (SPA) and Proposed Natural Heritage Area (pNHA)
Dalkey Island is a Special Protection Area (SPA) for birds and it is located within a Proposed Natural Heritage Area (pNHA): Dalkey Coastal Zone and Killiney Hill/Rochestown Hill (Site No. 2).

### 4.5 Protected Views:
There is an objective to preserve views from sites, areas and vantage points located along Coliemore Road and Nerano Road in Dalkey towards Dalkey Island.

### 4.6 Policies:
The County Development Plan 2010-2016 contains the following policies that are pertinent to the proposed development:

**9.3.9 Policy LHB13: Geological Sites**
It is Council policy to protect sites of Geological and Geomorphological importance, in particular proposed Natural Heritage Areas (NHAs) and County Geological Sites (CGS) that become designated during the lifetime of this Plan.
County geographical site—Dalkey island—water well

**11.2.3 Policy AH1: Protection of Archaeological Heritage**
It is Council policy to protect archaeological sites, National Monuments (and their setting), which have been identified in the Record of Monuments and Places (RMP), whilst at the same time reviewing and assessing the feasibility of improving public accessibility to sites and monuments under the direct ownership or control of the Council or of the state

**11.2.4 Policy AH2: Protection of Archaeological Material In-situ**
It is Council policy to seek the preservation in-situ (or, as a minimum, preservation by record) of all archaeological monuments included in the Record of Monuments and Places, and of previously unknown sites, features and objects of archaeological interest that become revealed through development activity. In respect of decision making on
development proposals affecting sites listed in the Record of Monuments and Places, the Council will have regard to the advice and/or recommendations of the Department of the Environment, Heritage and Local Government.

11.2.6 Policy AH4: Designation of Archaeological Landscapes
It is Council policy to identify, designate and protect Archaeological Landscapes in cooperation with relevant government departments.

11.2.7 Policy AH5: Historic Burial Grounds
It is Council policy to protect historic burial grounds within the County and encourage their maintenance in accordance with good conservation practice.

11.2.8 Policy AH6: Underwater Archaeology
It is Council policy for all developments, which have the potential to impact on riverine, inter-tidal and sub-tidal environments to require an archaeological assessment prior to works being carried out.
Under the National Monuments Acts all shipwrecks over one hundred years old, and other underwater archaeological structures, features and objects are protected.

11.3.6 Policy AR4: Protection of Buildings in Council Ownership
It is Council policy to carry out an audit and assess the condition of all Protected Structures within the Council’s ownership and/or control, and to devise a prioritised management/maintenance plan for these Structures.
The Council will demonstrate best conservation practice with regard to Protected Structures, Recorded Monuments and elements of architectural heritage in its ownership and care.

11.3.9 Policy AR7: Protection of Coastline Heritage
It is Council policy to promote the retention of features of the County’s coastal heritage where these contribute to the character of the area.

5.1 Appropriate Assessment - Screening Statement: (see appendix B)
The proposed development has been reviewed with regard to the need for an appropriate assessment in accordance with the requirements of the EU Habitats Directive 1992, the European Communities (Birds and Natural Habitat) Regulations 2011 and the ‘Guidance for Planning Authorities on Appropriate Assessment of plans and projects in Ireland’ (DoEHLG 2009)-This requires that screening is carried out for all projects to examine if any impacts are likely on Natura 2000 sites, that is, Special Areas of Conservation (SAC’s) and Special Protection Areas (SPA’s).
Given the scale and the location of the slipway works within the Dalkey Islands SPA, it was concluded that a full appropriate assessment would not be required for this project because it is considered not to have a significant effect on this site. The Appropriate Assessment - Screening Statement is provided with this Part 8 documentation (Appendix B) by the Council’s Biodiversity Officer. The A.A. Screening Statement has been prepared in accordance with the Planning and Development (Amendment) (No 3) Regulations 2011 and follows the proposed methodology outlined in the ‘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/EC’ (European Commission 2001).

Outlined in this A.A. Screening Statement are a number of obligations, restrictions and minor mitigation measures. These relate mostly to the timeframe for construction, transfer of materials using a helicopter and the presence of rare plants in the vicinity of the works to be avoided. Also outlined in the A.A. Screening Statement are a number of measures to ensure that the effectiveness of the minor mitigation measures are adequately monitored. These include;

- Periodic monitoring of the terns by an ecologist for the duration of the works to ensure that they are not displaying avoidance behavior on Lamb Island or Maiden Rock.
- Establishing protective fencing around rare plants in the vicinity of the slipway prior to commencement of works (to be supervised by an ecologist).
- Periodic monitoring of the fencing by an ecologist.

All restrictions, obligations and recommended mitigation measures as outlined in the A.A. Screening Statement will be strictly adhered to throughout the works.

A marine biologist has been commissioned to undertake survey works around the island and the location of the proposed works to assess the potential impacts of the construction works on the marine mammals and recommend mitigation measures. Any mitigation measures recommended will be strictly adhered to.

**6.0 Archaeology:**

The proposed development is located within a zone of archaeological potential and a fully qualified Archaeologist will undertake routine inspections of the works as required. The proposed development is also within an area of underwater archaeological potential. Given the location of the proposed development, an Archaeological Impact Assessment shall be undertaken to assess the impact of the development on known or potential archaeology prior to any works proceeding at the site. (see Appendix D for details).
7.0 **Environmental Impact Assessment:**

The proposed development has been reviewed taking account of the requirements of the Planning and Development Act, 2000-2011, as amended, and the Planning and Development Regulations 2001-2011, as amended, which outline the requirements for the assessment of the effects of certain projects on the environment. The proposed development has been reviewed taken into consideration the objectives and policies of the 2010-2016 Dun Laoghaire-Rathdown County Development Plan.

It is considered, having examined the provisions of Schedule 5, Development for the purposes of Part 10 of the Planning and Development Regulations 2001, as amended, that an Environmental Impact Assessment is not a mandatory requirement for the proposed development at Dalkey Island.

The proposed development is therefore considered to be sub-threshold. Having considered the criteria as set out in Schedule 7 of the Planning and Development Regulations, 2001, as amended, and the Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development, DOEHLG, 2003, it is considered that the proposed development would not be likely to have significant effects on the environment and therefore an Environmental Impact Assessment is not required.

8.0 **Council Strategies:**

All council strategies have been consulted and have been taken into account during all stages of the project in particular;

- Dun Laoghaire Rathdown Heritage Plan 2013 – 2018 (DRAFT)

9.0 **Statutory Consents:**

The following statutory consents are required prior to commencing construction works on Dalkey Island Slipway;

- Foreshore Lease (Foreshore Act 1933) – Department of Environment, Heritage and Local Government
10.0 Project Need & Justification: (see drawing no. 13895-0001)

10.1 The Slipway:
At present, the existing slipway on Dalkey Island is in a state of disrepair and consists of a narrow opening on the rocky foreshore, a short length of quay wall built on a rocky outcrop fronted by a concrete slipway to the west. A study was undertaken in January 2010 to consider the feasibility of replacing or repairing the existing landing place on Dalkey Island. The conclusions published recommended that the existing landing slip be repaired/upgraded for the following reasons;

- It has probably been the main landing place on the island since ancient times and is a place of considerable historic significance.
- It is considered the safest place to embark and disembark on the island.

10.2 Dalkey Island:
Dalkey Island is a place of rare beauty and distinctiveness which is generally only enjoyed by those which can access the island using private crafts. The construction of the landing slip will allow a safe embarkation and disembarkation point on the island increasing the capacity of the slipway only slightly with an expected modest impact on visitors. The location to land on the slipway is dependent on tide, it is anticipated that only two to three medium sized vessels can land at the slipway at any one time thus having modest impacts on visitor numbers. The potential modest impact on visitor numbers is to be addressed in the Conservation Plan which is currently being drafted for the island. The objective of the Conservation Plan is for the long term conservation, preservation and presentation of the islands. Given the complexity of the island in terms of its heritage, a ‘Dalkey Islands Steering Committee’ will be formed to draft the Conservation Plan and assist in the implementation of the Plan over the coming years. The Steering Committee will consist of the key stakeholders identified during the preparation of the 2005 Draft Heritage Management Plan and the preparation of this Part 8 development. It is envisaged that the Conservation Plan will be completed prior to any construction works proceeding on this proposed development. The completed Conservation Plan and any other projects to be undertaken as result of this plan will be the subject to further Appropriate Assessment Screenings and Part 8 proposals (if required). The construction of the new slipway will have the potential to facilitate controlled tours on the island in the future. Any plans to facilitate tours and consent to the operation of a ferry service (Licensed through the Department of Transport, Marine Survey Office) will be subject to a further Appropriate Assessment Screening.
11.0 **Details & Design Proposals:** (see drawing no. 13895-1004 & appendix C):

11.1 **General:**
The proposed slipway has been designed by Malachy Walsh & Partners (Consulting Engineers) and Shaffrey Associates Architects (Conservation Architects). Full design details can be found in Appendix C, Report on Proposed Works (incl. Architectural Heritage Impact Assessment). A brief summary of the proposed works are outlined below;

11.2 **Slipway:**
It is proposed to over-slab the existing slipway to provide a stepped top surface to the slipway. This will facilitate the required raising of the slipway and will reduce the need to reduce the extent of the deepening of the channel. The steps will have a going of approximately 1.5m for each 0.15m riser. The overall slope of the slipway will remain at 10m horizontal to 1m vertical. This will make the access safer and it should be accessible to ambulant disabled. A new handrail will also run the full length of the access, improving safety further. The finished surface will have a roughened finish and it will be ridged to direct run-off and provide underfoot grip.

It was not considered feasible to provide full disabled access to the slipway as a 20m horizontal to 1m vertical slope is required with landings at 0.9m vertical intervals. As well as leading to significant additional costs, the slipway would become very slippery in time making access difficult and less safe. Towards high water, access for the disabled will be easier as it will be via the flat pier section of the proposed development.

11.3 **Pier:**
A set of steps are proposed in order to provide a transition from the slip to the pier deck. It is proposed to remove the existing pier structure and replace it with a concrete structure raised between 200mm and 800mm over existing deck which will allow easier berthing and a longer effective berthing face on high tides. The surface of the pier will have a rough brushed finish.

11.4 **Approach Channel:**
To improve access at low tide, it is proposed to widen and deepen the channel adjacent to the slip. The deepening at this point will be between 200mm and 500mm and the channel will be widened to 3.5m.

11.5 **Ancillary Items:**
It is proposed to fit a handrail along the northern side of the slip, pier and steps. This handrail will be constructed of aluminium bronze which has a high corrosion resistance. Galvanised mooring rings are to be set into the slip and pier deck at approximately 5m
intervals. A galvanised ladder will be held in place using chemical anchors. A galvanised steel pole will be placed towards the seawards end of the slipway as a navigation aid.

11.6 Access Steps:
It is proposed to widen the existing steps which lead to the grassy bank on the island behind the landing slip. These will be surfaced in concrete with either a rough or exposed aggregate finish.

______________ ENDS./
Part 8 Report

Proposed Upgrade to the Slipway at Dalkey Island

APPENDICES

November 2012

Prepared by:
Eoin O'Brien MILI, PMP, Executive Parks Superintendent
## Appendix A: List of Drawings

**DLR Project Ref: 2056**

<table>
<thead>
<tr>
<th>Dwg. No.</th>
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<td>1/2000</td>
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<td>13895-0001B</td>
<td>Existing Site Layout, Sections, Elevations &amp; Photographs</td>
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<td>Varies</td>
</tr>
<tr>
<td>13895-1004I</td>
<td>Proposed Site Layout, Sections &amp; Elevations</td>
<td>A1</td>
<td>Varies</td>
</tr>
<tr>
<td>Dev Plan Map 4</td>
<td>County Development Plan 2010 - 2016 Extract Map no. 4</td>
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<td>NTS</td>
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</table>
Appendix B: Appropriate Assessment Screening Statement

Prepared by Mary Toomey, DLR Biodiversity Officer
Upgrade to Dalkey Island Slipway

Habitats Directive Screening Report

Prepared by DLRCC, November 2012
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Appendices

Appendix 1: Dept of Arts, Heritage and the Gaeltacht correspondence.
Appendix 2: BirdWatch Ireland Comments
Appendix 3: Visitor Code of Conduct (draft)
Appendix 4: Statutory Instrument No. 238 of 2010
Appendix 4: Marine Ecological Survey Report
Appendix 5: Method statement for the protection of rare clovers
1 Introduction

1.1 Aims and objectives

This Biodiversity Officer was commissioned to review the proposed plans for upgrading the Dalkey Island Slipway and to prepare a Habitats Directive Screening Report.

The purpose of this Habitats Directive Screening Report is to determine whether the proposed works for upgrading the Dalkey Island Slipway are likely to have a significant effect on any Natura 2000 sites within the potential impact zone of the proposed development. To achieve this, the screening report takes into consideration the potential for proposed plan to result in:

1) Adverse impacts on qualifying interest features (i.e. habitats and species for which the sites have been designated) of the Natura 2000 sites; and
2) Adverse impacts on the integrity of the Natura 2000 sites.

1.2 Legal requirements for Habitat Directive

The E.U. Habitats Directive 1992 sets out legal requirements for the establishment and management of a network of ecological sites of international conservation importance across Europe known as the Natura 2000 Network. Two types of sites are included in the Natura 2000 Network. These are **Special Protection Areas (SPAs)**, which are designated for their bird interest under the E.U. Birds Directive, and **Special Areas of Conservation (SACs)**, which are designated for other important flora and fauna under the E.U. Habitats Directive. These sites are given strict protection under E.U. legislation.

According to the E.U. Habitats Directive any plan or project that is not directly connected with or necessary to the management of the Natura 2000 site, but which is likely to have significant effect on it, on its own, or in combination with other plans or projects, is to be authorised only if it will not significantly adversely affect the integrity of the site. The method for deciding whether there will, or will not be an effect, is called **Appropriate Assessment (also known as Habitats Directive Assessment)**.


1) **Stage 1: Screening** (the process which identifies the likely impacts of a project or plan, on its own or in combination with other projects or plans, upon a Natura 2000 Site).

2) **Stage 2: Appropriate Assessment** (the consideration of the impacts on the Natura 2000 site and a review of the effectiveness of possible mitigation measures).

3) **Stage 3: Alternative Solutions** (a process which examines alternative options for a project or plan which will avoid any adverse impacts on the Natura 2000 site).
4) **Stage 4: Assessment where adverse impacts remains** (an assessment of compensatory measure which can be undertaken if adverse impacts remain and the project or plan is permitted to proceed for Reason of Overriding Public Interest.

In November 2009, the DoEHLG issued *Guidance for Planning Authorities on Appropriate Assessment of plans and projects in Ireland (DoEHLG 2009).* The DoEHLG guidance document recommends that *all plans and projects* should undergo Screening (Stage 1) and, if necessary, a full Appropriate Assessment (Stage 2) to ensure that adverse impact on Natura 2000 sites are avoided.

## 2 Project Description

Dún Laoghaire-Rathdown County Council wishes to upgrade the existing slipway at Dalkey Island. While the slipway is in reasonable condition, the concrete deck and facing of the quay was poorly built and is badly damaged. At low spring tides, the harbour empties completely of water, which makes landing particularly challenging.

The proposed works will include rebuilding the main upper quay from a solid, mass reinforced concrete deck. Local granite will be used to restore the quay facing wall and the steps leading from the quay to the main path running through the island. Hitching rails and handrails will be installed along the slipway and the quay for health and safety reasons. A roughly textured finish will be created on the concrete deck by bush hammering or spraying.

The bed of the channel, beside the quay, will be cleared of old debris to increase the depth, and the entrance will be cleared of a number of sub-marine rocks that restrict access. Two stainless steel posts will be fixed into sub-marine rocks to define the entrance channel.

It is proposed to heli-lift the construction material and plant to the island in order to complete the works.

## 3 Methodology

The guidance issued by the DoEHLG recommends that *all Natura 2000 site within 15km of a proposed plan should be screened.* The guidance notes that, for projects, a smaller radius may be more appropriate depending on the nature of the project. Due to the small-scale and localised nature of this project, it was considered that 5km radius would adequately identify potential impact zones.

Natura 2000 sites within 5km of the proposed development, or with hydrological links to the proposed development site, were identified.

Potential impact sources (i.e. potential effects which could impact on Natura 2000 sites) associated with the proposed Dalkey Island Slipway where identified, as were potential impact pathways (linkages) and potential receptors (qualifying interest features of Natura 2000 site). Potential impact pathways include:

1) Physical linkages between the proposed works and Natura 2000 sites;
2) Hydrological linkages between the proposed works and Natura 2000 sites; and
3) Movement of species between the proposed site of works and Natura 2000 sites.

The qualifying interest features and conservation objectives of these sites were reviewed in order to identify potential impacts of the proposed upgrade to the slipway on these sites.

BirdWatch Ireland (Headquarters and South Dublin Branch) and the National Parks and Wildlife Service, Department of Arts, Heritage and Gaeltacht were consulted regarding the proposed works. A copy of the response from the Department of Arts, Heritage and Gaeltacht and BirdWatch Ireland is provided in Appendix 1 and Appendix 2, respectively.

4 Summary of the Natura 2000 sites identified

The proposed Dalkey Island Slipway is located on the western edge of Dalkey Island, which forms part of the Dalkey Islands SPA. There are two other Natura 2000 sites within 5km of the proposed works. These sites, their distance from Dalkey Island Slipway, their qualifying interest features and conservation objectives are summarised in Table 1 below.
<table>
<thead>
<tr>
<th>Site</th>
<th>Distance from metals walkway</th>
<th>Interest Features</th>
<th>Conservation Objectives</th>
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<tbody>
<tr>
<td>South Dublin Bay SAC</td>
<td>4km</td>
<td><strong>Main Interest Features</strong></td>
<td><strong>Objective 1:</strong> To maintain the Annex I habitat for which the cSAC has been selected at favourable conservation status: Mudflats and sandflats not covered by seawater at low tide.</td>
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<td></td>
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<td>• Mudflats and sandflats not covered by seawater at low tide.</td>
<td><strong>Objective 2:</strong> To maintain the extent, species richness and biodiversity of the entire site.</td>
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<td><strong>Other Features</strong></td>
<td><strong>Objective 3:</strong> To establish effective liaison and co-operation with landowners, legal users and relevant authorities.</td>
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<td>• Eel grass</td>
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<td>• Embryonic dunes</td>
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<td>• Gulls</td>
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<td><strong>Main Interest Features</strong></td>
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<td>• Light-bellied Brent Goose</td>
<td>To maintain the special conservation interests for this SPA at favourable conservation status: Light-bellied Brent Goose, Knot, Sanderling, Bar-tailed Godwit, Redshank, Roseate Tern, Common Tern, Arctic Tern, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Dunlin, Black-headed Gull, Wetland &amp; Waterbirds.</td>
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<tr>
<td>South Dublin Bay and River Tolka Estuary SPA</td>
<td>4km</td>
<td><strong>Main Interest Features</strong></td>
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<td>• Knot</td>
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<td>• Arctic Tern</td>
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<td><strong>Additional Special Conservation Interests</strong></td>
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<td>• Oystercatcher</td>
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<td>• Ringed Plover</td>
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<td>• Black-headed Gull</td>
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### Dalkey Islands

**pSPA**

**Site code:** 004172

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<th>Wetland &amp; Waterbirds</th>
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**Slipway is located within the SPA**

**Main Interest Features**
- Roseate Tern
- Common Tern
- Arctic Tern

To maintain the special conservation interests for this SPA at favourable conservation status: Roseate Tern, Common Tern, Arctic Tern
5 Screening Assessment

The screening assessment follows the proposed methodology outlined in the ‘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/EC’. A separate screening matrix has been completed for each Natura 2000 site that has hydrological links or is within a 5km radius of Dalkey Island slipway. Each matrix considers potential impacts of the proposed upgrade works on the integrity of the site and the qualifying interest features (i.e. the species and habitats for which the site has been designated).

According to the EU Habitats Directive, favourable conservation status of a habitat is achieved when:
- its natural range, and area it covers within that range, is stable or increasing, and
- the ecological factors that 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 as defined below.

The favourable conservation status of a species is achieved when:
- population data on the species concerned indicate that it is maintaining itself, and
- the natural range of the species is neither being reduced or 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.

Matrix 1: South Dublin Bay SAC (site code 000210)

<table>
<thead>
<tr>
<th>Brief description of the project or plan</th>
<th>See section 2</th>
</tr>
</thead>
</table>
| Brief description of the Natura 2000 site | The site extends from South Wall to the west pier at Dun Laoghaire. It is an intertidal site with extensive areas of sand and mudflats, a habitat listed on Annex I of the E.U. Habitats Directive. There is a bed of Eelgrass (Zostera noltii) below Merrion Gates which is the largest stand on the east coast. Green algae (Enteromorpha spp. and Ulva lactuca) are distributed throughout the area at a low density. Fucoid algae occur on the rocky shore in the Maretimo to Dún Laoghaire area. The macro-invertebrate fauna is well-developed, and is characterised by annelids such as Lugworm (Arenicola marina), Nephthys spp. and Sand Mason (Lanice conchilega), and bivalves, especially Cockle (Cerastoderma edule) and Baltic Tellin (Macoma balthica).

South Dublin Bay is also an important site for waterfowl, gulls and terns. |
**Assessment Criteria**

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site.

| Dalkey Island Slipway, the site of the proposed works, is located 4km from the SAC. The proposed works will not result in any direct impacts on the Natura 2000 site or any reduction in area or deterioration in condition of the sand and mudflats for which the site is designated. |
| Similarly, there are unlikely to be any significant impacts on the population size, range or habitat for waders and wildfowl as the construction works are very localised and the slipway does not form an important habitat for any of these species. |

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:

- Size and scale;
- Land-take;
- Distance from Natura 2000 site or key features of the site;
- Resource requirements (water abstraction etc);
- Emission (disposal to land, water or air);
- Excavation requirements;
- Transportation requirements;
- Duration of construction, operation, decommissioning etc;
- Other.

| Given the localised nature of the works, no adverse impacts on important bird populations or their habitats are anticipated. As noted above the slipway does not form an important habitat for waders or wildfowl. |

Describe any likely changes to the site arising as a result of:

- Reduction of habitat area;
- Disturbance to key species;
- Habitat or species fragmentation;
- Reduction in species density;
- Changes in key indicators of conservation value (water quality etc)

| Given the distance of the proposed development from the site and the localised nature of the proposed works, no impacts on the site are anticipated. |

Describe any likely impacts on the Natura 2000 site as a whole in terms of:

- Interference with the key relationships that define the structure of the site;
- Interference with key relationships that define the function of the site.

| Given the distance of the proposed development from the site and the localised nature of the proposed works, no impacts on the species or habitats are anticipated. |
Provide indicators of significance as a result of the identification of effects set out above in terms of:  
- loss  
- fragmentation  
- disruption  
- disturbance;  
- change to key elements of the site (eg water quality etc)

<table>
<thead>
<tr>
<th>Provide indicators of significance as a result of the identification of effects set out above in terms of:</th>
<th>No potential adverse impacts have been identified.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts are not known.</td>
<td>As no adverse impacts have been identified, it is not anticipated that there will be any in-combination effects from other projects or plans.</td>
</tr>
</tbody>
</table>

**Matrix 2: South Dublin Bay and River Tolka Estuary SPA (site code: 004024)**

<table>
<thead>
<tr>
<th>Brief description of the project or plan</th>
<th>See section 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief description of the Natura 2000 site</td>
<td>The site includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included.</td>
</tr>
<tr>
<td></td>
<td>There is a bed of Dwarf Eelgrass (<em>Zostera noltii</em>) below Merrion Gates which is the largest stand on the east coast. Green algae (<em>Enteromorpha</em> spp. and <em>Ulva lactuca</em>) are distributed throughout the area at a low density.</td>
</tr>
<tr>
<td></td>
<td>The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern and Arctic Tern.</td>
</tr>
</tbody>
</table>

**Assessment Criteria**

| Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site. | Dalkey Island Slipway, the site of the proposed works, is located 4km from the SPA. The proposed works will not result in any direct impacts on the Natura 2000 site or any reduction in |
area or deterioration in condition of the sand and mudflats, which are important for the long-term conservation of the bird species for which the site has been designated.

Similarly, there are unlikely to be any significant impacts on the population size, range or habitat for waders and wildfowl as the construction works are very localised and the slipway does not form an important habitat for any of these species.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:
- Size and scale;
- Land-take;
- Distance from Natura 2000 site or key features of the site;
- Resource requirements (water abstraction etc);
- Emission (disposal to land, water or air);
- Excavation requirements;
- Transportation requirements;
- Duration of construction, operation, decommissioning etc;
- Other.

Given the localised nature of the works, no adverse impacts on important bird populations or their habitats are anticipated. As noted above the slipway does not form an important habitat for waders or wildfowl.

Describe any likely changes to the site arising as a result of:
- reduction of habitat area:
- disturbance to key species;
- habitat or species fragmentation;
- reduction in species density;
- changes in key indicators of conservation value (water quality etc)

Given the distance of the proposed development from the site and the localised nature of the proposed works, no impacts on the site are anticipated.

Describe any likely impacts on the Natura 2000 site as a whole in terms of:
- interference with the key relationships that define the structure of the site;
- interference with key relationships that define the function of the site.

Given the distance of the proposed development from the site and the localised nature of the proposed works, no impacts on the species or habitats are anticipated.

Provide indicators of significance as a result of the identification of effects set out above in terms of:
- loss

No potential adverse impacts have been identified.
| · fragmentation  
| · disruption  
| · disturbance;  
| · change to key elements of the site (eg water quality etc) |

<table>
<thead>
<tr>
<th>Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts are not known.</th>
</tr>
</thead>
<tbody>
<tr>
<td>As no adverse impacts have been identified, it is not anticipated that there will be any in-combination effects from other projects or plans.</td>
</tr>
</tbody>
</table>

### Matrix 3: Dalkey Islands pSPA (site code: 004172)

<table>
<thead>
<tr>
<th>Brief description of the project or plan</th>
<th>See section 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brief description of the Natura 2000 site</strong></td>
<td>Dalkey Islands SPA lies 400m off Sorrento Point and includes Dalkey Island, Lamb Island and Maiden Rock. The site is a proposed SPA for the following species: Roseate Tern, Common Tern and Arctic Tern. Common and Arctic Tern nest on Lamb Island and Maiden Rock, and Roseate Tern nest on Maiden Rock. The numbers of nesting pairs can fluctuate greatly from year to year. The site is particularly important for roosting terns in late summer and autumn.</td>
</tr>
</tbody>
</table>

### Assessment Criteria

| Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site. | The proposed upgrade to the slipway will result in localised disturbance within the SPA. There will be direct disturbance to existing areas of hard standing and a small section of intertidal habitat (a few square meters). There will be temporary disturbance to some of the rough grassland on the island while the site compound is in place. This grassland is dominated by Yorkshire Fog and should re-vegetate following the removal of the site compound. The compound and any storage of material will be placed on rough grassland away from short-turf grassland that supports rare clover species. The proposed construction works are unlikely to impacts on the population |

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DLRCC Dalkey Island Slipway Habitats Directive Screening Report 12
size, range or habitat of tern species for which the site has been designated as the construction works are very localised and are taking place on Dalkey Island, which is away from the breeding sites of terns. In addition the works are scheduled to take place in April and May, with the more disturbing works including heli-lifting of construction material taking place in April before the terns return to breed.

As an additional precaution, weekly monitoring of the terns from May onwards will ensure that any potential disturbance to terns is quickly identified and addressed. Monitoring will be carried out by a qualified ecologist.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site by virtue of:
· Size and scale;
· Land-take;
· Distance from Natura 2000 site or key features of the site;
· Resource requirements (water abstraction etc);
· Emission (disposal to land, water or air);
· Excavation requirements;
· Transportation requirements;
· Duration of construction, operation, decommissioning etc;
· Other.

The transfer of construction materials to the Dalkey Island using a helicopter could result in some disturbance to terns. It is proposed to undertake this work during April, before the terns return to the area.

It is not anticipated that the proposed works will result in an increase in unofficial visits to the Islands. The works will permit additional boat access at low tide, but as this will only be possible in calm weather conditions and the island is fully accessible at mid-high tide, the additional access will not have a significant impact on the terns.

The Council is in the process of developing a conservation plan for the Dalkey Islands. If in future, the Council plans to organises official tours of the Island, the scale and frequency of these proposals will be outlined in detail in the conservation plan which will be subject to AA Screening and/ or a full Appropriate Assessment to ensure that they do not impact nesting or roosting terns and the nature conservation objectives for the site.

The Council plans to install signs at Colimore Harbour and Bullock Harbour informing people of the importance of the Islands for nesting and roosting birds. Signs will also be installed on Lamb Island and Maiden Rock requesting that visitors do not land on these Islands between early May and
October to avoid disturbance to nesting/roosting birds.

A visitors code of conduct for the site will be prepared as part of the Dalkey Islands conservation plan. A copy of the code of conduct will be included in future signage for the islands.

Describe any likely changes to the site arising as a result of:
- reduction of habitat area;
- disturbance to key species;
- habitat or species fragmentation;
- reduction in species density;
- changes in key indicators of conservation value (water quality etc)

1) The works will result in the loss of a small area of rock from the inter-tidal area surrounding the harbour. The construction works may result in localised sedimentation in the vicinity of the harbour. This is unlikely to be significant in the long-term and should be dispersed by natural wave action.

2) Impacts on rare plants close to the slipway will avoided by providing protective fencing around rare plants in the vicinity of the works. The protective fencing will be installed before works commence and will remain in place until all works have been completed. An ecologist will be present during the erection of the fencing and will monitor its condition and functionality periodically throughout the works.

These changes to the site are not expected to impact on the population size, range or habitat of tern species.

Describe any likely impacts on the Natura 2000 site as a whole in terms of:
- interference with the key relationships that define the structure of the site;
- interference with key relationships that define the function of the site.

There will be minor impact to a small area (a few meters square) of inter-tidal habitat. This is unlikely to interfere with key relationships that define the structure or function of the site. A marine ecological survey was carried out in 2010 to assess the ecological importance of habitats and species in the vicinity of the slipway and found that it supported habitats and species which are common and widespread throughout Ireland (Ecoserve 2010).

Provide indicators of significance as a result of the identification of effects set out above in terms of:
- loss
- fragmentation
- disruption

No potential adverse impacts have been identified. Disturbance to terns should be avoided by undertaking the most potentially disturbing works during April, prior to their arrival.

1) A significant impact on terns would
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts are not known.

As no adverse impacts have been identified, it is not anticipated that there will be any in-combination effects from other projects or plans.

### 6 Conclusions

The proposed work is taking place within Dalkey Island SPA. However, no adverse impacts on Natura 2000 sites were identified as a result of the proposed upgrade works to the slipway. Two sites (South Dublin Bay SAC and South Dublin Bay and River Tolka Estuary SPA) are located within a 5km radius of the proposed works and no impacts on these sites are anticipated.

The proposed works will result in disturbance to a very small area of inter-tidal habitat around the existing slipway and temporary disturbance to a small area of rough grassland dominated by Yorkshire Fog. The works may result in temporary sedimentation around the slipway, but this should be dispersed by natural wave action. Rare plants in the vicinity of the slipway will be protected by install protective fencing in advance of any works. These impacts are not considered significant and are unlikely to affect key relationships, which define the structure or function of Dalkey Island SPA.

No direct or in-direct impacts on tern species are anticipated as a result of the proposed works as the works are taking place away from important nesting and roosting areas and the more potentially disturbing works are taking place in April, prior to the arrival of terns to the area.

As an additional precaution, monitoring of the terns and the rare plants and will be carried out by a qualified ecologist on a weekly basis.

Unregulated visits to the Islands do occur at present. The proposed works are not expected to significantly increase unregulated visits to the Islands. The Council plans to install signs at Colimore Harbour and Bullock Harbour informing people of the importance of the Islands for nesting and roosting birds. Signs will also be installed on Lamb Island and Maiden Rock requesting that visitors do not land on these Islands between early May and October to avoid disturbance to nesting birds.

Although it is not directly connected to the proposed works, the Council is currently preparing a conservation plan for Dalkey Islands. The potential for offering regulated guided tours of Dalkey Island and any detailed proposals will
be reviewed under this plan. A separate Habitats Directive Screening Report and / or full Appropriate Assessment will be undertaken as part of the conservation plan. A visitor’s code of conduct will be developed for the islands as part of the conservation plan.

7 References


Appendix 1: Dept. of Arts, Heritage & the Gaeltacht correspondence.
Re: Upgrade to Slipway of Pier at Dalkey Island

A Chara,

I refer to the notification dated 18 July 2012 in relation to the above proposed development. Outlined below are the recommendations of the Department of Arts, Heritage and the Gaeltacht in relation to nature conservation.

In order to protect the Terns on Dalkey Island SPA from disturbance the seasonal constraint with regard to helilifting of materials, and other measures recommended in the AA screening, must be adhered to. It should be noted that where mitigation measures are deemed necessary that the documentation presented would be more appropriate to a NIS as opposed to an appropriate assessment screening.

You should also note that, apart from appropriate assessment, if there are impacts on protected species and their habitats, resting or breeding places as a result of this proposed development that licenses may be required under the Wildlife Acts or derogations under the Habitats Regulations. In particular bats and otters are strictly protected under annex IV of the Habitats Directive and a copy of Circular Letter NPWS 2/07 entitled “Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – strict protection of certain species/applications for derogation licences” can be found on our website at http://www.npws.ie/media/npws/publications/circulars/media.6686.en.pdf.

In addition licenses will be required if there are any impacts on other protected species or their resting or breeding places, such as on protected plants, badger setts or birds nests. Bird’s nests can only be intentionally destroyed under licence issued under the Wildlife Acts of 1976 and 2000. In order to apply for any such licenses or derogations as mentioned above a detailed survey should be submitted to the Department which should have been carried out by appropriately qualified person/s. The Department notes the intention to site the works compound and storage of materials away from the locations of the rare clover plants to ensure no disturbance to its habitat.

The above observations and recommendations are based on the papers submitted to this Department on a pre-planning basis and are made without prejudice to any observations the Minister may make in the context of any consultation arising on foot of any development application referred to the Minister, by the planning authority, in his role as statutory consultee under the Planning and Development Act, 2000, as amended.
Kindly forward any further information received; or in the event of a decision being made a copy of same should be forwarded to the following address as soon as it issues:

The Manager,
Development Applications Unit,
Department of Arts, Heritage and the Gaeltacht,
Newtown Road,
Wexford.

Alternatively, documentation associated with the above can be referred electronically to the DAU at the following address: manager.dau@ahg.gov.ie

In addition, please acknowledge receipt of these observations by return.

Is mise le meas,

[Signature]

Patricia O’Leary
Development Applications Unit
Tel: (053) 911 7482
The Manager
Development Applications Unit,
Department of Arts, Heritage and the Gaeltacht
Newtown Road,
Wexford
Manager_dau@ahg.gov.ie
By post & email

13th November 2012

RE: Upgrade to Slipway and Pier at Dalkey Island

A Chara,

In relation to the above proposed development, I refer to your letter to Mary Toomey, Biodiversity Officer dated the 30th August 2012 (ref: G Pre00329/2012).

I refer to the item raised outlining that where mitigation measures are deemed necessary that the documentation presented would be more appropriate to a NIS as apposed to an appropriate assessment screening. While minor mitigation measures are being proposed, it was determined by Dun Laoghaire Rathdown County Council that the proposed development would not have a significant impact on the European site and therefore a Natura Impact Statement would not be required in respect of the proposed development.

I also refer to the item raised relating to the impacts on protected species and their habitats, resting and breeding places as a result of the proposed development. A marine biologist has been commissioned to undertake an assessment for marine mammals with regard to the proposed works and recommend mitigation measures if necessary. Any mitigation measures recommended will be strictly adhered to. While the surveying works are commencing in the coming weeks, the final report is not scheduled to be complete until January 2013. Due to our restricted timescale for undertaking the works, the proposed development is due to proceed to Part 8 public consultation the week beginning Monday the 12th November 2012.

Please do not hesitate to contact me if you require further information.

Is mise le meas

Eoin O’Brien
Project Manager, Executive Parks Superintendent
22 November 2012

Dún Laoghaire-Rathdown County Council
County Hall
Dún Laoghaire
County Dublin
eoinobrien@DLRCOCO.IE

Re: Upgrade to Slipway of Pier at Dalkey Island

A Chara,

I refer to your email and post notification dated 13 November 2012.

(Previously two responses were submitted in response to the notification dated 18 July 2012 in relation to the above listed foreshore application. Recommendations in relation to nature conservation were submitted on 30 August 2012. Recommendations of the Department of Arts, Heritage and the Gaeltacht in relation to underwater archaeology were submitted on 4 September 2012.)

Underwater archaeology comment with regard to Further Information received in letter reference L13248:
The letter received from DLR indicating that they will carry out an Underwater Archaeology Impact Assessment is noted.

Nature conservation comment with regard to Further Information received in letter reference L13247: The Department has no further nature conservation comments.

In the event of a decision being made a copy of same should be forwarded to the following address as soon as it issues:

The Manager,
Development Applications Unit,
Department of Arts, Heritage and the Gaeltacht,
Newtown Road,
Wexford.

Alternatively, documentation associated with the above can be referred electronically to the DAU at the following address: manager.dau@ahg.gov.ie

In addition, please acknowledge receipt of these observations by return.

Is mise le meas,
Patricia O’Leary  
Development Applications Unit  
Tel: (053) 911 7482
Appendix 2: BirdWatch Ireland Comments
For: Mary Toomey, Biodiversity Officer, Dun Laoghaire-Rathdown County Council

Comments: The proposal to upgrade the boat harbour/slipway on Dalkey Island

From: BirdWatch Ireland, Dr Stephen Newton (Senior Conservation Officer- Seabirds) & Niall Hatch (South Dublin Branch), 22 June 2010
snewton@birdwatchireland.ie

Context: BirdWatch Ireland (HQ and South Dublin Branch) have worked in partnership with the County Council to deliver conservation action for the tern colony on the Dalkey Islands for over 15 years and concurrently provide ‘public viewing’ opportunities from the vicinity of Coliemore Harbour. The terns primarily nest on two of the more isolated islets, Maiden Rock and Lamb Island, but we also aim to assist in the better management of the entire archipelago for the benefit of nesting seabirds and other interesting avifauna.

In our opinion, the proposed actions of the Feasibility Study (Report) of Howley Hayes Architects do not have any direct significant impact on the nesting (or wintering) birds of the Dalkey Islands with respect to the nature and location of the works. However, the timing of such operations is of more interest and we would prefer the works to be carried outside the main seabird breeding and post-breeding/staging season. This period spans a four month period from early May through to early September. The islands are used by nesting terns and Herring and Great Black-backed Gulls from the beginning of May to the end of July and subsequently large numbers of post-breeding terns gather on the islets and surrounding rocks from late July to early September. The proposed ‘heli-lift’ of construction materials and plant would potentially be the most disturbing activities for the terns, and if possible this could be completed in a good weather window in April, ahead of the terns arrival (usually in the first half of May). Actual construction work, concreting etc., could proceed through the nesting season.

Other issues: If the upgrading of the landing on Dalkey Island proceeds, then perhaps it would be timely to assess facilities and access at the main point of visitor embarkation, Coliemore Harbour. In contrast to Bullock Harbour, where the slipway is kept clear to permit launching of craft, that at Coliemore is perpetually blocked by upturned boats in a long-term state of repair or storage. As a public facility this should be cleared so that small craft and canoes/kayaks can be launched without ‘amazing’ balancing acts and lifts over the top of the ‘blockage’.

Whilst construction proceeds on the island, it would be an opportune time to improve signage at the point of landing:
In terms of bird conservation issues, a ‘code of conduct’ should ask visitors:

- Not to cross the rocks between Dalkey Island and Lamb Island at low tide during the breeding season, nor to land on that island or Maiden Rock from the sea. The erection of flags on this island and camping or bonfires during the summer should be deemed anti-social behaviour.

- Not to approach the feral goats too closely (maybe suggest a distance of 50-100 metres) so that they are not forced to seek refuge on Lamb.

- Keep back from the colony of nesting Great Black-backed Gulls on the southeast ‘corner’ of Dalkey Island. The birds are large, powerful and will at times hit people who threaten their eggs or young. Again a distance of 50-100 metres is suggested.

Miscellaneous comments on the report

The ‘salvage’ of local stone to dress the new landing area would need to be carefully supervised so that botanical interests are not damaged.

The island is not a ‘Site of Special Scientific Interest’; this is a British designation. It is a proposed Natural Heritage Area.

Signage on the island should ask harbour users to consider others and not to block access for other boats for long periods.

The ferry operators still seem to be in business (with or without appropriate licences?)—this should be acknowledged.
Appendix 3: Proposed Visitor Code of Conduct (draft)
Appendix 3: Dalkey Islands Visitor Code of Conduct

1 Introduction

Dún Laoghaire-Rathdown County Council (DLRCC) has produced the following code of conduct for visitors to Dalkey Islands (including Dalkey Island, Lamb Island and Maiden Rock). The purpose of the code of conduct is to prevent environmental degradation and to maintain the natural character of the Islands so that everyone can enjoy them.

Dalkey Islands are designated as a Special Protection Area for roosting tern species (Common Tern, Arctic Tern and Roseate Tern) and it is important that we provide terns with space to nest and roost. Terns may be present between May and October

1 General Guidelines

- Dogs are not permitted on the Islands in order to avoid disturbance to nesting birds.
- Visitors are not permitted on the Islands after 4pm in winter (October – March) and 9pm in summer (April – September).
- Visitors must maintain an appropriate distance from birds, seals and goats, which is safe and does not cause them disturbance. As a general rule, maintain a distance of 50 - 100m.
- DLRCC supports the ‘Leave No Trace’ environmental policy. Please take all your rubbish home with you.
- Do not take biological or geological souvenirs from the Islands
- Fire is a serious threat to both safety and ecology. Lighting fires of any description is not permitted on the Islands

3 Site Specific Guidelines

- Visitors are not permitted to land on Lamb Islands and Maiden Rock between May and October when terns are nesting and roosting. Please do not cross the rocks between Dalkey Island and Lamb Island during this period.
- Visitors should keep clear of the southeast corner of Dalkey Island during the bird-nesting season (March – September). Nesting Great Black-backed Gulls uses this area. These birds are large, powerful and will at time hit people who threaten their eggs or young. A distance of 50-100m should be maintained.
STATUTORY INSTRUMENTS.


EUROPEAN COMMUNITIES (CONSERVATION OF WILD BIRDS (DALKEY ISLANDS SPECIAL PROTECTION AREA 004172)) REGULATIONS 2010.

(Prn. A10/0747)

EUROPEAN COMMUNITIES (CONSERVATION OF WILD BIRDS (DALKEY ISLANDS SPECIAL PROTECTION AREA 004172)) REGULATIONS 2010.


1. (1) These Regulations may be cited as the European Communities (Conservation of Wild Birds (Dalkey Islands Special Protection Area 004172)) Regulations 2010.

(2) These Regulations come into operation on 26th May 2010.

2. (1) In these Regulations—


“farm or land management plan” means an agreement between the holder of any estate, right or interest in land within the special protection area and the Minister or the Minister for Agriculture, Fisheries and Food for the purposes of, inter alia, compliance with the Directive and Council Directive No. 92/43/EEC of 21 May 1992. Without prejudice to the generality of the foregoing, this may take the form of a plan under the Farm Plan Scheme administered by the Department of Environment, Heritage and Local Government or a Rural Environment Protection Scheme plan (REPS) administered by the Department of Agriculture, Fisheries and Food, or any similar or successor plan;

Notice of the making of this Statutory Instrument was published in “Iris Oifigiúil” of 4th June, 2010.
“foreshore area” means the bed and shore, below the line of high water of ordinary or medium tides, of the sea and of every tidal river and tidal estuary and of every channel, creek and bay of the sea or of any such river or estuary;

“land” includes any structure and any land covered with water (whether inland or coastal), any substratum of land and any estate, right or interest in, on, over or under land;

“Minister” means the Minister for the Environment, Heritage and Local Government;

“public authority” means:—

(a) a Minister of the Government;

(b) a local authority within the meaning of the Local Government Act 2001 (No. 37 of 2001); or,

(c) a board or other body (but not including a company under the Companies Acts) established by or under statute;

“Special Protection Area” or “SPA” means the area which is designated under Regulation 3;

“waterbird” means any bird ecologically dependent on a wetland habitat wholly, or for at least part of their annual cycle;

“wetland” refers to areas of habitat containing water, whether natural or artificial, permanent or temporary, static or flowing, fresh, brackish, or marine.

(2) A word or expression that is used in these Regulations and is also used in the Directive shall, unless the contrary intention appears, have in these Regulations the meaning that it has in the Directive.

3. In order to ensure the survival and reproduction of the species to which Article 4 of the Directive relates, including in particular the species specified in Schedule 3 and having taken account of the matters referred to in Article 4 of the Directive, the area referred to in Schedule 2 and further identified by reference to the maps contained in Schedule 1, is designated as a Special Protection Area.

4. (1) Subject to paragraph (2), a person shall not perform any operation or activity specified in Schedule 4 in the Special Protection Area without the prior written consent of the Minister.

(2) There is no requirement to obtain the consent of the Minister if:—

(a) the operation or activity is licensed by or subject to the permission of another public authority, or
the operation or activity is specified as permitted in a farm or land management plan (subject to compliance with any conditions set out therein).

5. (1) Any person who contravenes Regulation 4(1) commits an offence and is liable:—

(a) on summary conviction to a fine not exceeding €5,000 or imprisonment for a term not exceeding 6 months, or both, or

(b) on conviction on indictment to a fine not exceeding €500,000 or imprisonment for a term not exceeding 3 years, or both.

(2) A summary offence under these Regulations may be prosecuted by the Minister.
SCHEDULE 2

DESCRIPTION OF AREA

The area known as Dalkey Islands Special Protection Area is situated in the County of Dublin being the land and waters enclosed on the map (contained in Schedule 1 to these Regulations) within the inner margin of the red line and hatched in red. The site comprises Dalkey Island, Lamb Island and Maiden Rock, the intervening rocks and reefs, and the surrounding sea to a distance of 200 metres.

SCHEDULE 3

SPECIAL CONSERVATION INTERESTS

Bird Species

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterna dougallii</td>
<td>Roseate Tern</td>
</tr>
<tr>
<td>Sterna hirundo</td>
<td>Common Tern</td>
</tr>
<tr>
<td>Sterna paradisaea</td>
<td>Arctic Tern</td>
</tr>
</tbody>
</table>

SCHEDULE 4


1. Any activity that involves the deliberate killing or capture of any species of naturally occurring bird in the wild state, save where a specific derogation within the meaning of Article 9 of the Directive is in place.

2. The destruction, damage or removal of nests or eggs or any disturbance, particularly during periods of breeding or rearing, save where a specific derogation within the meaning of Article 9 of the Directive is in place.

3. The rearing or keeping of birds, the hunting and capture of which is prohibited, save where a specific derogation within the meaning of Article 7 of the Directive is in place.
SITE SPECIFIC OPERATIONS OR ACTIVITIES REQUIRING CONSENT

4. Burning areas of vegetation.

5. Developing, operating or allowing leisure or sporting activities liable to cause significant disturbance to those birds listed in Schedule 3 of these Regulations or damage to their habitats.

6. Construction or alteration of tracks, paths, roads, embankments, car parks or access routes, or using or permitting the use of land for car parking.

7. Dumping, burning or disposal of any materials.

8. Planting of trees.

9. Reclamation or infilling.

10. Removal of soil, mud, sand, gravel, rock or minerals.

11. Introduction (or re-introduction) into the wild of plants or animals not currently found in the area.

12. Grazing of livestock above a recommended density and period as defined in approved farm plans.

13. Any activity which destroys habitat, except normal maintenance activities as defined in approved farm plans.

14. Reclaiming land for agricultural purposes, including spraying or burning vegetation, clearing scrub and rough vegetation, draining or moving soil, ploughing, harrowing or reseeding.

15. Any other activity of which notice may be given by the Minister from time to time.

GIVEN under my Official Seal,
26 May 2010.

JOHN GORMLEY, T.D.,
Minister for the Environment, Heritage and Local Government.
EXPLANATORY NOTE

(This note is not part of the Instrument and does not purport to be a legal interpretation.)

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds provides for the conservation of wild birds by, among other things, classifying important ornithological sites as Special Protection Areas for them. The effect of these Regulations is to designate a site as a Special Protection Area in accordance with Article 4 of the Directive and to provide that contravention of the provisions of these Regulations shall constitute an offence.

Under Article 5 of the Directive all species of birds are afforded protection from disturbance, capture and damage to nests and eggs, not just the birds listed on Schedule 3 (with the exception of those birds covered under Articles 7 for hunting, and Article 9 where derogations are listed).

Please note that operations/activities other than those listed at Schedule 4 to these Regulations, such as effluent discharge, planning permission, aquaculture, fishing or forestry require a licence or permission from the appropriate consent authority.
BAILE ÁTHA CLIATH
ARNA FHOILSIÚ AG OIFIG AN tSOLÁTHAIR
Le ceannach direach ón
OIFIG DHIOLTA FOILSEACHÁN RIALTAIS,
TEACH SUN ALLIANCE, SRÁID THEACH LAIGHEAN, BAILE ÁTHA CLIATH 2,
nó tríd an bpost ó
FOILSEACHÁIN RIALTAIS, AN RANNÓG POST-TRÁCHTA,
AONAD 20 PÁIRC MIÓNIÓLA COIS LOCHA, CLAR CHLAINNE MHUIRIS,
CONTAE MHAIGH EO,
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Conservation Objectives for Dalkey Islands SPA [004172]

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:
• its natural range, and area it covers within that range, are stable or increasing, and
• 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, and
• 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.

Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

• Sterna dougallii
• Sterna hirundo
• Sterna paradisaea
Appendix 5: Marine Ecological Survey Report
Marine Ecological Survey

Dalkey Island slipway

Report for:
Dún Laoghaire–Rathdown County Council

July 2010

Report by:
Ecological Consultancy Services Ltd (EcoServe)
B23 KCR Industrial State,
Ravensdale Park,
Kimmage, Dublin 12

www.ecoserve.ie
<table>
<thead>
<tr>
<th>Print name</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by:</td>
<td>Dr. Róisín Nash</td>
</tr>
<tr>
<td>Checked by:</td>
<td>Barbara Maciejewska</td>
</tr>
<tr>
<td>Authorised by:</td>
<td>Dr. Róisín Nash</td>
</tr>
</tbody>
</table>
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1. Introduction

Ecological Consultancy Services Limited (EcoServe) was appointed by Dun Laoghaire – Rathdown Co Co to carry out a marine biotope assessment in relation to the proposed development of a slipway at Dalkey Island, Co. Dublin. Study Area

Dalkey Island is part of the Dalkey Coastal Zone and Killiney Hill pNHA (site code, 001206). The location of the proposed slipway development is on the east coast of Dalkey Island (Figure 1, 53° 16.244’N, 6° 05.136’W). Dalkey Island is a small island c. 400 m off Sorrento Point.

![Figure 1. Map showing the location of the study site on Dalkey Island in relation to Dun Laoghaire Harbour. ©2010 GOOGLE maps](image)

2. Methodology

2.1. Marine Survey

A marine survey was carried out on the 22\textsuperscript{nd} of July 2010. The survey was carried out on a falling high tide due to both the difficulty in landing a boat at low tide and the higher chance of recording some of the species identified in the pNHA as being noteworthy, including squat lobsters and crawfish, and some rare European species such as feather star \textit{Antedon bifida} all of which have been recorded from Dalkey sound.

Surveyors mapped the biotopes along the shore in accordance with the procedures described by Emblow \textit{et al.} (1998) and Davies (2001). Surveyors walked along the shore in order to identify and map the extent and distribution of biotopes. Biotope identification was carried out in the field and species lists for each biotope were compiled. Biotopes and species lists
were compared to existing data and interpreted using the biotope classification (Connor et al., 2004). The survey was initiated on 3 hours prior to low tide which on the day measured 1.1 m above Chart Datum.

A snorkel survey was carried out within the channel which runs parallel to the slipway and just beyond the entrance perpendicular to the channel and parallel to the outer shoreline of Dalkey Island. The survey was carried out in order to identify subtidal biotopes and to ensure that no Qualifying Interests in the vicinity of the proposed development were overlooked. The snorkel survey involved carrying out transects perpendicular to the shoreline. This allowed the nature of the substratum to be established and the subtidal biotopes to be identified. Data collected during the subtidal survey was used to assign a distinct biotope to each of the examined sites in accordance with the principles detailed by Emblow et al. (1998) and Davies et al. (2001). This data was mapped using colour codes to provide a visual representation of the existing environment.

3. Existing Marine Environment

3.1. Marine Habitats

Habitat maps of the marine environment provide a better understanding of the distribution and extent of marine habitats in the study area. Knowledge of the distribution of marine habitats helps to facilitate better management of the marine environment, through establishing sensible approaches to the conservation needs of each habitat based on their spatial distribution.

Littoral and sublittoral survey

Public access to Dalkey Island is by boat via a channel alongside a concrete slipway and deck on the eastern coast. The lower slipway is only uncovered on a low tide. On a low spring tide the channel has been recorded as almost devoid of water showing a clear intertidal zonation of flora and fauna. Nine biotopes were recorded from the survey area (Appendix 1).

The site is backed by a grasslands type habitat, described as ‘rough turf’, with an underlying eroded soil layer. The biotope map of this site is presented in Figure 2. Yellow and grey lichens, including *Caloplaca marina*, were characteristic of the hard substrata in the Supralittoral zone (LR.FLR.Lic.YG). Below this was a band of the black lichen *Verrucaria maura* on boulders, bedrock and along the upper section of the slipway (LR.FLR.Lic.Ver.Ver).

Amphipod burrows were recorded along the strand line (LS.LSa.St.Tal). Rubbish stranded by the tide was also observed in patches along the strandline. The shore was a gravely shore with some small rocks scattered around and which were covered with a green ephemeral algae lower down the shore (LS.LCS.Sh).

The small bay and channel surrounding the slipway was very sheltered and characterised in the upper eulittoral by a narrow band of channel wrack *Pelvetia caniculata* on bedrock, stable
boulders and mixed gravel substrata. In some areas the wrack was overlying patches of the black lichen *Verrucaria Maura* (LR.LLR.F.Pel). In the outer channel the non-calcified red algae *Hildenbrandia rubra* covered the hard substrata in the *Pelvetia* zone and below. The red alga *Catenella caespitosa* was recorded in more shaded areas within the channel, while the green seaweed *Enteromorpha* spp. was present throughout the littoral zone.

Below this biotope, although not in a continuous band, was a *Fucus vesiculosus* biotope on mixed substrata (LR.LLR.F.FvesX). This zone was also found along the inner section of the concrete slipway. Here there was a community consisting of the winkles *Littorina saxatilis* and *Littorina littorea* and sparse individuals of the barnacle *Chthalamus montagui* and *C. stellatus*. On the lower steep south facing edges of the slipway which were slightly more exposed there was 95% cover of these two species of barnacle along with large individuals of the limpet *Patella vulgata*, which in most cases had *Enteromorpha* sp and/or barnacles, attached to its shell (LR.MLR.BF.FvesB). Also with in this biotope and into the next biotope a variety of red algae including *Mastocarpus stellatus* was recorded from underneath the fronds attached to the rocks. Patches of the knotted wrack *Ascophyllum nodosum* and ephemeral green seaweeds such as *Enteromorpha* sp. were commonly found in this area both attached to rocks and to seaweed. The sand binding algae *Rhodothamniella floridula* was recorded from on sand-covered rocks in the littoral zone.

Additionally, there was a considerable amount of seaweed washed up and located in two bands within the channel. This debris consisted mainly of *Fucus serratus* and *Laminaria digitata* most likely originated from the adjacent habitats. In total it was 3m in width and no invertebrates or fish species were recorded in this area during the snorkelling survey. The moon jellyfish *Aurelia aurita* was recorded floating within the channel.

The mid eulittoral rock was dominated by the wrack *Ascophyllum nodosum*. Here plants measured up to 1.5m in length. The red seaweed *Polysiphonia lanosa* was recorded growing as an epiphyte on the fronds along with the hydroid *Dynamena pumila* (LR.LLR.F.AscX).

The lower eulittoral bedrock was characterised by a canopy of the wrack *Fucus serratus*, and its associated fauna including the limpet *Patella vulgata* and the dog whelk *Nucella lapillus*. Green seaweeds such as *Enteromorpha intestinalis* and *Ulva lactuca* were present among/beneath the *F. serratus* canopy. The canopy of *F. serratus* was dense and had a few red seaweeds (*Palmaria palmata*, *Mastocarpus stellatus* and *Corallina officinalis*) *Ascophyllum nodosum* was also recorded amongst the Fucus (LR.LLR.F.Fser). The whelk *Nucella lapillus* was found in high abundance as you moved towards the outer edge of the channel and along the coast both north and south. The winkle *Littorina littorea*, the top shell *Gibbula umbilicalis* and *Gibbula cineraria*, and the crab *Carcinus maenas* were commonly found among the canopy and underneath boulders. High numbers of spirorbids were recorded on the fronds of c. 30% of the brown seaweed *Fucus serratus*, particularly at the entrance of the channel.
3.2. Marine mammals

There is a wide range of marine mammal’s species recorded from the surrounding waters of the Dalkey Island. According to data provided by the Irish Whale and Dolphin Group the most common sightings includes the harbour porpoise Phocaena phocaena, and the bottlenose dolphin Tursiops truncates, the common dolphin Delphinus delphis. During our survey 4 grey seals Halichoerus grypus were recorded in the vicinity of the slipway (2 adult and 1 juvenile male and 2 adult females). The grey seal is a protected species in Ireland under the under Annex II and V of the EC Habitats Directive.

4. Conclusion

The area in the vicinity of Dalkey Island slipway is sheltered and the marine biotopes recorded typify such conditions. The presence of the knotted wrack alone is an indicator of a sheltered shore. All the species and biotopes recorded are typical of marine environments and have been widely recorded around Ireland (Picton & Costello, 1998, EcoServe unpublished data). No species which have been named as a qualifying interest in the description of the pNHA were recorded during this survey.

Note: there are official guidelines to be followed for construction works on or near to areas which have recorded protected marine mammals in their vicinity. These guidelines have been devised in order to minimise the effects of construction works on marine mammals.
5. References


DMNR, 2005, Guidelines for correct procedures when encountering whales and dolphins in irish coastal waters. Marine Notice No. 15.


EC, 2001, 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.

Appendix 1 – Biotope description

**Yellow and grey lichens on supralittoral rock (LR.FLR.Lic.YG)**

Vertical to gently sloping bedrock and stable boulders in the supralittoral (or splash zone) of the majority of rocky shores are typically characterised by a diverse maritime community of yellow and grey lichens, such as Xanthoria parietina, Caloplaca marina, Lecanora atra and Ramalina spp. The black lichen Verrucaria maura is also present, but usually in lower abundance than in the littoral fringe zone. In wave exposed conditions, where the effects of sea-spray extend further up the shore, the lichens generally form a wide and distinct band. This band then becomes less distinct as wave exposure decreases, and in sheltered locations, cobbles and pebbles may also support the biotope. Pools, damp pits and crevices in the rock are occasionally occupied by winkle Littorina saxatilis and halacarid mites may also be present.

**Verrucaria maura on very exposed to very sheltered upper littoral fringe rock (LR.FLR.Lic.Ver.Ver)**

Upper littoral fringe bedrock, boulders and stable cobbles on very exposed to very sheltered shores which have a blanket covering of the black lichen Verrucaria maura. The winkle Littorina saxatilis is often present. Due to the nature of this biotope it is species poor, but occasionally a range of species may be present in low abundance. These species include the yellow lichen Caloplaca marina and the winkle Melarhaphe neritoides, the barnacles Chthamalus montagui and Semibalanus balanoides or the ephemeral seaweeds Porphyra umbilicalis and Enteromorpha spp. can be present in low abundance (see Ver.B). If one or more of these species is present compare with Ver.B. On northern shores Littorina saxatilis var. rudis can dominate along with the occasional presence of the lichens Verrucaria mucosa and Xanthoria parietina. V. maura can be found overlying stable mud in N. Ireland sea loughs.

**Talitrids on the upper shore and strand-line (LS.LSa.St.Tal)**

A community of sandhoppers (talitrid amphipods) may occur on any shore where driftlines of decomposing seaweed and other debris accumulate on the strandline. The biotope occurs most frequently on medium and fine sandy shores, but may also occur on a wide variety of sediment shores composed of muddy sediment, shingle and mixed substrata, or on rocky shores. The decaying seaweed provides cover and humidity for the sandhopper Talitrus saltator. In places on sand that regularly accumulate larger amounts of weed, Talorchestia deshayesii is often present. Oligochaetes, mainly enchytraeids, can occur where the stranded debris remains damp as a result of freshwater seepage across the shore or mass accumulation of weed in shaded situations. On shingle and gravel shores and behind saltmarshes the strandline talitrid species tend to be mainly Orchestia species. Abundances of the characterising species tend to be highly patchy. Two characterising species lists are presented below. They are derived from two sets of data, which were analysed separately. The first shows data from infaunal samples, the second shows data from epifaunal samples. The epifaunal lists contains no counts per square metre, as the data were collected on the SACFOR scale.
**Shingle (pebble) and gravel shores (LS.LCS.Sh)**

Littoral shingle and gravel shores include shores of mobile pebbles and gravel, sometimes with varying amounts of coarse sand. The sediment is highly mobile and subject to high degrees of drying between tides. As a result, few species are able to survive in this environment. Beaches of mobile shingle tend to be devoid of macroinfauna, while gravelly shores may support limited numbers of crustaceans such as Pectenogammarus planicrurus.

*Pelvetia canaliculata* on sheltered littoral fringe rock (LR.LLR.F.Pel).

Lower littoral fringe bedrock or stable boulders and mixed substrata in sheltered to extremely sheltered conditions characterised by a dense cover of the wrack *Pelvetia canaliculata*. The biotope may be present in localised sheltered patches on moderately exposed shores. *P. canaliculata* overgrows a crust of black lichens *Verrucaria maura* or the non-calcified red algae *Hildenbrandia rubra* on very sheltered shores. Individuals of the wrack *Fucus spiralis* can usually be found among the *P. canaliculata* and/or in lower part of the biotope. This biotope lacks the density of barnacles found amongst the *P. canaliculata* on more exposed shores. The winkle *Littorina saxatilis* occurs, as do a variety of amphipods. The red alga *Catenella caespitosa* can be present especially in more shaded areas while the green seaweed *Ulva* spp. can be present in moist areas.

(LR.LLR.F.FvesX)

Sheltered and very sheltered mid eulittoral pebbles and cobbles lying on sediment in fully marine conditions typically characterised by the wrack *Fucus vesiculosus*. The wrack *Ascophyllum nodosum* can occasionally be found on larger boulders while the barnacle *Semibalanus balanoides* and the limpet *Patella vulgata* also can be present on the cobbles with the whelk *Nucella lapillus* preying on the barnacles and on the mussel *Mytilus edulis*. Winkles, particularly *Littorina littorea* and *Littorina obtusata*, commonly graze the biofilm on the seaweeds, while *Littorina saxatilis* can be found in crevices. Ephemeral seaweeds such as *Enteromorpha intestinalis* may be present in this biotope. The sediment between patches of hard substrata often contains the polychaete *Arenicola marina* or the polychaete *Lanice conchilega*, while a variety of gastropods and the crab *Carcinus maenas* occur on and under cobbles.

(LR.MLR.BF.FvesB)

Exposed to moderately exposed mid eulittoral bedrock and boulders are frequently characterised by a mosaic of the barnacle *Semibalanus balanoides* and the wrack *Fucus vesiculosus*. The limpet *Patella vulgata* and the whelk *Nucella lapillus* are typically present, whilst the anemone *Actinia equina* and small individuals of the mussel *Mytilus edulis* are confined to crevices. Underneath the *F. vesiculosus* is a community of red seaweeds, including *Corallina officinalis*, *Mastocarpus stellatus* and *Osmundea pinnatifida*, usually with the winkles *Littorina littorea* and *Littorina* spp. present. Opportunistic seaweeds such as *Enteromorpha intestinalis* may occur in patches recently cleared on the rock or growing on the *M. edulis*. 
Sheltered to extremely sheltered full salinity mixed substrata (cobbles, boulders and pebbles on sediment) characterised by a canopy formed by a mosaic of the wracks Ascophyllum nodosum and Fucus vesiculosus. The red seaweed Polysiphonia lanosa can often be found as an epiphyte on the A. nodosum. The mussel Mytilus edulis often occurs in clumps, and provides further suitable substrata for the attachment of fucoids and red and green seaweeds such as Polysiphonia spp. and Enteromorpha intestinalis or the barnacle Semibalanus balanoides. Winkles are common and Littorina littorea and Littorina obtusata/mariae may occur in high densities, while species such as the limpet Patella vulgata, the crab Carcinus maenas and the whelk Nucella lapillus may occur on and around the boulders. Gammarids can be found underneath the boulders or among the seaweeds, while tube-forming spirorbids are found on the boulders, shells or on the F. vesiculosus. Infaunal species including the polychaetes Arenicola marina and Lanice conchilega may occur in the sediment between the cobbles.

Sheltered to extremely sheltered lower eulittoral rock with Fucus serratus. Sheltered lower eulittoral rock subject to fully marine conditions characterised by a dense canopy of the wrack Fucus serratus. There is a wide range of associated species found on the surface of the rock underneath the canopy, including the barnacle Semibalanus balanoides, limpets Patella vulgata, winkles Littorina littorea, and even mussels Mytilus edulis can be present in cracks and crevices. These species are usually found in higher abundance further up on the shore. There may also be a number of other seaweeds present, including the red Corallina officinalis and Mastocarpus stellatus, the wrack Fucus vesiculosus and the green Enteromorpha intestinalis, Ulva lactuca or Cladophora rupestris, though these usually are present in low numbers if present at all. The sponge Halichondria panicea can be present underneath the F. serratus canopy in moist cracks or minor overhangs. Polychaetes such as Pomatoceros triqueter and Spirorbis spp. are present in their white calcareous tubes on the rock.
### Appendix 2 – Selected images

<table>
<thead>
<tr>
<th>Plate 1. Strandline with rubbish visible</th>
<th>Plate 2. Inner channel with Fucus visible in the forefront</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate 3. Rocky outcrop to the left of the channel with lichen biotopes visible</td>
<td>Plate 4. Slipway and steps leading to the island</td>
</tr>
<tr>
<td>Plate 5. Beds of <em>Ascophyllum nodosum</em></td>
<td>Plate 6. Zonation along the coastal rocks</td>
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</tbody>
</table>
Appendix 6: Method Statement for the protection of rare clovers
Appendix 6: Method Statement for the protection of rare clovers during construction works to the slipway.

1 Introduction

Three species of clover (Bird’s-foot Clover *Trifolium ornithopodioides*, Rough Clover *Trifolium scabrum* and Western Clover *Trifolium occidentale*) which are rare in Ireland, being confined to a small number of 10km squares primarily along the east coast, are found on Dalkey Island. These are generally confined to the short-turf maritime grassland in areas of shallow soil, frequently where rabbit grazing occurs. Two of these species, Rough Clover and Western Clover are found in grassland in the vicinity of the existing slipway and their exact locations were recorded using a hand-held GPS to an accuracy of 6-8m in 2010.

As the clovers are very small, inconspicuous and difficult to identify even when flowering, it is possible that they are also present in other locations within of the short-turf maritime grassland, which were not identified at the time of survey.

It is important that the necessary mitigation measures are undertaken to ensure that the clovers and their habitat are protected during works to the slipway.

2 Mitigation Measures

In order to ensure the protection of the rare clovers during construction works to the slipway the following measure should be implemented:

1. The short-turf maritime grassland in the vicinity of the slipway and any other areas that could potentially be impacted by the proposed works must be fenced off in advance of the construction works commencing.
2. An experienced botanist with the necessary skill to identify these species and their habitat will define the area to be fenced and supervise the installation of the fencing.
3. The botanist will monitor the condition and functionality of the fencing periodically throughout the works.
4. If there is a breach in the fencing at any stage, works will stop immediately until the fencing has been repaired.
5. Any compounds or construction material that is to be stored on the site during the works must be stored on the rank grassland dominated by *Holcus lanatus*. The proposed storage area must be clearly defined and assessed by the botanist in advance of any material being transferred to the island to ensure that it does not impact on any areas of botanical importance.
6. The botanist will supervise the removal of the fencing and make an assessment of condition of the short-turf maritime grassland following the completion of the works.