



ENVIRONMENTAL CONSULTANTS

Appropriate Assessment Stage 1: Screening

Cabinteely Greenway
Dún Laoghaire-Rathdown, Co. Dublin

Document Details

Client: DBFL Consulting Engineers

Project Title: Cabinteely Greenway

Document Title: Appropriate Assessment Stage 1: Screening

Prepared by: Flynn Furney Environmental Consultants

Rev	Status	Date	Author(s)	Approved by
01	DRAFT	31/12/2024	LME	CD
02	DRAFT	30/04/2025	LME, CD	CD, BF
03	FINAL	16/05/2025	LME, CD	BF
04	FINAL	27/06/2025	LME, CD	BF
05	FINAL	14/10/2025	LME, CD	BF

1. Introduction	6
1.1. Background.....	6
1.2. Relevant Legislation and Screening Methodology	6
1.2.1. Appropriate Assessment Screening Report.....	9
1.3. Reference Documents	9
1.4. Statement of Authority	10
1.5. Project Description	10
1.6. Site location	13
2. Identification of Relevant Natura 2000 Sites	14
2.1. SPR Model.....	14
2.2. Works, Site Characteristics & Risks to the Environment.....	14
2.3. Nearby Natura 2000 Sites	15
2.3.1. Connections via Land, Air and Water	17
2.3.2. Mobile QIs	18
2.4. COs and QIs of Relevant Natura 2000 Sites	20
3. Assessment of Likely Significant Effects	26
3.1. Desk Study	26
3.1.1. Protected Species Records - National Biodiversity Centre	26
3.1.2. Protected Species Records – DLR Internal Data.....	27
3.2. Site Visit & Ecological Survey.....	28
3.2.1. Habitats	28
3.2.2. Invasive species	30
3.2.3. Wintering Birds	30
3.3. Natura 2000 Sites with the Potential to be Significantly Affected by the Proposed Development.....	31
3.3.1. South Dublin Bay and River Tolka Estuary SPA [004024]	31
3.3.2. North Bull Island SPA [004006]	33
3.4. Investigation into the Likelihood of Significant Effects upon QI Species	35

3.4.1. Light bellied brent geese	35
3.4.2. Oystercatcher.....	37
3.5. Summary of Potential Impacts.....	37
3.6. Cumulative and/or In-Combination Effects with Other Plans and Projects	38
3.6.1. Regional and Local Plans	38
3.6.2. Larger-scale Local Projects	39
3.6.3. Smaller-scale Local Projects	40
3.6.4. Conclusion.....	41
4. Summary	42
4.1. Appropriate Assessment Screening Criteria	42
4.1.1. Is the Project necessary to the Management of the Natura 2000 Site(s)?	42
4.1.2. Possible Direct, Indirect or Secondary Impacts.....	42
4.1.3. Likelihood of Significant Effects on QI Species.....	42
5. Conclusion.....	44
6. Citations & Reference Documents	45
7. Appendix I: Survey Data	48
7.1. Winter Bird Survey.....	48

1. Introduction

1.1. Background

Flynn Furney Environmental Consultants have been appointed to provide the information necessary to allow the competent authority to conduct an Article 6(3) Screening for Appropriate Assessment (AA), and to provide an AA Screening Determination for the proposed development of a greenway between Cornelscourt and Cherrywood via Cabinteely Park, Co. Dublin, for the consideration of the local authority.

Screening for AA is required under *Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora* (the Habitats Directive). This AA Screening Report has been prepared in accordance with the European Commission's *Assessment of Plans and Projects Significantly affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC* (EC, 2021) and *Managing Natura 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC* (EC, 2018) as well as the Department of the Environment's *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities* (DoEHLG, 2010).

Sites that are designated for protection under the Natura 2000 Network are often referred to interchangeably as Natura 2000 Sites, Designated Sites, and European Sites. For the purposes of consistency, they are referred to in this report as **Natura 2000 Sites**, with the exception of titles and quotes from published document that refer to them differently.

1.2. Relevant Legislation and Screening Methodology

The methodology for this screening statement is set out in a document prepared for the European Commission's Directorate-General for Environment entitled *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC* (European Commission, 2019, amended 2021). This report and any contributory fieldwork were carried out in accordance with guidelines given by the Department of Environment, Heritage and Local Government (2009, amended 2010) and the National Transport Authority (2023).

The process is given in Articles 6(3) and 6(4) of the Habitats Directive and is commonly referred to as "Appropriate Assessment" (which also refers to Stage 2 in the sequence under the Habitats Directive Article 6 assessment). Article 6 of the Habitats Directive sets out provisions which govern the conservation and management of Natura 2000 Sites, Articles 6(3) and 6(4) specifically set out the decision-making tests for plans and projects likely to affect these Sites.

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

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

Article 6(4) of the same directive states:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of the [designated European] site is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

It is the responsibility of the proponent of the plan or project to provide the relevant information (ecological surveys, research, analysis etc.) for submission to the competent authority. Having satisfied itself that the information is complete and objective, the competent authority will use this information to screen the project, i.e. to determine if an AA is required and to carry out the AA, if one is deemed necessary. The competent authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the Site(s) concerned.

The AA process has four stages. Each stage determines whether a further stage in the process is required. If, for example, the conclusions at the end of Stage One are that there will be no significant impacts on the Natura 2000 Site(s), there is no requirement to proceed further. The four stages are:

- Screening to determine if an appropriate assessment is required
- Appropriate assessment
- Consideration of alternative solutions
- Imperative reasons of overriding public interest/derogation

Table 1: The stages of AA.

Stage 1: Screening for AA
The aim of screening is to assess firstly if the plan or project is directly connected with or necessary to the management of Natura 2000 Site(s); or in view of best scientific knowledge, if the plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on any Site(s). This is done by examining the proposed plan or project and the conservation objectives of any Natura 2000 Sites that might potentially be affected. If screening determines that there is potential for significant effects or there is uncertainty regarding the significance of effects, then it will be recommended that the plan or project is brought forward to the next stage of the AA process.
Stage 2: Appropriate Assessment
The aim of stage 2 of the AA process is to identify any adverse impacts that the plan or project might have on the integrity of relevant Natura 2000 Site(s). As part of the assessment, a key consideration is 'in combination' effects with other plans or projects. Where adverse impacts are identified, mitigation measures can be proposed that would avoid, reduce or remedy any such negative impacts and the plan or project should then be amended accordingly, thereby avoiding the need to progress to Stage 3.
Stage 3: Assessment of Alternative Solutions
If it is not possible during Stage 2 of the AA process to conclude that there will be no adverse effects on Site integrity, Stage 3 of the process must be undertaken which is to objectively assess whether alternative solutions exist by which the objectives of the plan or project can be achieved. Explicitly, this means alternative solutions that do not have adverse impacts on the integrity of a Natura 2000 Site. It should also be noted that EU guidance on this stage of the process states that, " other assessment criteria, such as economic criteria, cannot be seen as overruling ecological criteria " (EC, 2002). In other words, if alternative solutions exist that do not have adverse impacts on Natura 2000 Sites; they should be adopted regardless of economic considerations. This stage of the AA process should result in the identification of the least damaging options for the plan or project.
Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)/Derogation
This stage of the AA process is undertaken when it has been determined that a plan or project will have adverse effects on the integrity of a Natura 2000 Site, but that no alternatives exist. At this stage of the AA process, it is the characteristics of the plan or project itself that will determine whether or not the competent authority can allow it to progress. This is the determination of 'overriding public interest'. It is important to note that in the case of Natura 2000 Sites that include in their qualifying features "priority" habitats or species, as defined in Annex I and II of the Habitats Directive, the demonstration of "overriding public interest" is not sufficient and it must be demonstrated that the plan or project is necessary for "human health or safety considerations". Where plans or projects meet these criteria,

they can be allowed, provided adequate compensatory measures are proposed. Stage 4 of the process defines and describes these compensation measures.

1.2.1. Appropriate Assessment Screening Report

This report provides **Stage One: Screening for appropriate assessment**. It aims to establish whether a plan or project is likely to have any significant effects on any Natura 2000 Sites. The study is based on a preliminary impact assessment using both publicly available data and data collected during site visits and ecological surveys. This is followed by a determination of whether there is a risk that the effects identified could significantly impact any Natura 2000 Site, and if so, an AA is required. The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by the European Court of Justice case law. Therefore, where significant effects are likely, possible or uncertain at the screening stage, AA will be required.

A Stage One: Screening can be broken down into the following steps:

- **A description of the plan or project** that is being screened, including its nature, size and location.
- **Identification of relevant Natura 2000 Sites**, as well as their qualifying interests (QIs) and conservation objectives (COs). Direct, indirect, and cumulative effects are similarly identified for sites with connectivity to the proposed plan or project, determined by the Source-Pathway-Receptor approach.
- **Assessment of likely effects** (direct, indirect, and in-combination) in line with the COs for each site identified. This section is supported by data gathered from a desk study and from site visits and ecological surveys. Following this, a determination is given as to whether Significant Effects will be likely on any Natura 2000 Sites. The Precautionary Approach is a fundamental element of this assessment, and where there is doubt as to whether an effect may be likely, significant, or both, it is assumed to be so.
- **Screening report conclusion**, outlining the findings and conclusion of the author. Reasoning to support the conclusion, along with supporting evidence, is also included.

1.3. Reference Documents

The following relevant documents were considered in preparation of this report.

Table 2: Reference Documents.

Name / Number	Description
Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities	National guidance on Appropriate Assessment for planning authorities. Department of Environment, Heritage and Local Government, (2010 revision)
Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities	Circulars issued by the Department of Environment, Heritage and Local Government with guidance relating to Appropriate Assessment. Circular NPWS 1/10 & PSSP 2/10 (2010)
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	The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Articles 6(3) and (4) of the Habitats Directive European Commission Environment Directorate-General, (2001 and updates April 2015 and September 2021).
Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC	Publication to the Member States with an interpretation of certain concepts in Article 6 of the Habitats Directive. EC Environment Directorate-General (2018)
Communication from the Commission on the precautionary principle.	Publication relating to the use of the precautionary principle. European Commission (2000)

1.4. Statement of Authority

Survey work and reports were carried out by ecologists of Flynn Furney Environmental Consultants. Field assessments were undertaken in June, January & December of 2024, and January of 2025. This report has been prepared by C. Doyle (BSc, PGDip) & L. Mac Elwain (B.Sc., M.Sc., MCIEEM) & reviewed by B. Flynn (BSc, MSc (Agr.), H.Dip, Dip Ind., MIBiol, MCIEEM, MIEEnvSc. CEnv).

1.5. Project Description

The Proposed Scheme has an overall length of approximately 2.3 km, commencing at the Bray Road/Cornelscourt Hill Road (R842) junction in Cornelscourt Village. It continues along Cornelscourt Hill

Road, Glen Lawn Drive, Cabinteely Park, Clonkeen Road, Brennanstown Road and then connects to the Cherrywood Green Routes Network. The Proposed Scheme involves the creation of an urban greenway and comprises four distinct sections. The proposed general layout of each of these sections is as follows:

Section A: Bray Road/Cornelscourt Hill Road Junction to Glen Lawn Drive

Widening the existing footpath on the eastern side of Cornelscourt Hill Road to create a 4.0 m wide shared path with a short, localized narrowing to 3.0 m to avoid impacting an existing mature tree. The route then passes through a green space and links to Glen Lawn Drive.

Section B: Glen Lawn Drive to Cabinteely Park

A new 4.0 m wide shared path will be constructed along the southern side of Glen Lawn Drive with a new raised zebra crossing proposed for the western end of Glen Lawn Drive. Alterations will be made to the existing Glen Drive Roundabout geometry and raised zebra crossings provided over each arm for pedestrians and cyclists.

Section C: Cabinteely Park plus connection north to the N11 via Clonkeen Road

The existing park entrance on Glen Drive will be closed. A new entrance to Cabinteely Park will be established on the north side of the stream (adjacent the Glen Drive roundabout), along with a second new entrance adjacent the Old Bray Road/Glen Drive junction. The route will largely follow the existing path alignment along the northern side of the park and connect to Brennanstown Road. The path will be upgraded to provide a 5.0 m wide segregated path (2.0 m footpath and 3.0 m two-way cycle track). This section of the route also includes a connection to the N11 via the new park entrance and Clonkeen Road, which will be converted to a shared street.

Section D: Brennanstown Road to Cherrywood Green Routes Network

A new entrance will be created into the park on Brennanstown Road. Where the route crosses Brennanstown Road, a one-lane two-way shuttle system is introduced for vehicular traffic. This facilitates a safe crossing point for pedestrians and cyclists. The route continues as a shared path through the woodland area south of the Carraig Glen estate. The shared path will be 3.0 m wide at the entrance to this woodland area, widening back to 4.0m once it passes through the ecologically sensitive zone. This path follows the eastern side of Cabinteely Stream, with a new zebra crossing over Brennanstown Avenue. A new pedestrian/cyclist bridge is proposed to cross over to the western side of the Cabinteely Stream facilitating direct connections to the Cherrywood Green Routes network.

In addition to the above, landscaping and public realm works will be undertaken at key locations with higher quality materials, informal play areas, planting and street furniture to enhance the experience of users of the Proposed Scheme.

Lighting will be installed along the greenway route, including within Cabinteely Park and between Brennanstown Road and Brennanstown Avenue, to the following specifications:

- 123. no. lighting units will be installed as part of this development.
- Light spill at the path under the lighting columns will be 5 lux, reducing to <0.5 lux at the edge of the lit zone. The warmth of the bulbs will be set to 2,200 K.
- The lighting plan details the location and light spill along the entire route; however the lighting plan drawing files are too large to include in this report but are available as part of the planning documents.
- All newly installed lighting within Cabinteely Park and c.130 m along the section east of Brennanstown Road will be turned off from 22:00 every evening, until 06:00 the following morning.

The main characteristics of the Construction Phase of the Proposed Scheme are:

- Site preparation and clearance
- Access and travel on/off site, including temporary access routes for construction vehicles
- Removal of existing pavements, lighting columns, boundaries, trees and vegetation
- Protection and/or diversion of buried services
- Reconfiguration of traffic lanes, junction / roundabout modification, pavement reconstruction and kerb improvements
- Laying of path material (tar and aggregate)
- Provision of new structures (e.g. bridge over Cabinteely Stream at south end, reconstruction of existing retaining wall to the east of Brennanstown Road, construction of new entrances to the park)
- Movement of materials to / from or within a site
- Property boundary reinstatement, signage replacement, relocation of and / or installation of lighting columns
- Ground excavation, infilling, landscaping and tree planting
- Ancillary works (storage of soil, materials and plant)

Most of the new pathways will be constructed where there are existing pedestrian and vehicle routes, with some sections requiring the laying of a mix of new footpaths and cycle lanes through grassland and woodland within and adjoining Cabinteely Park. Works activities will include:

- Access and travel on/off-site, including temporary access routes for construction vehicles and vessels
- Areas for plant maintenance and for storage of oils, fuels and chemicals
- Setup and subsequent removal of site offices/compounds and final site clearance after construction
- Movement of materials to/from or within a site

- Stripping of topsoil
- Ground excavation, infilling and landscaping
- Laying of path material (tar and aggregate)
- Construction of bridge over the Cabinteely Stream at south end to allow the Greenway to join onto the new development at Cherrywood.
- Removal of several trees
- Planting of new trees and associated landscaping
- Installation of lighting columns and cabling
- Construction of new entrances in the park
- Ancillary works (storage of soil, materials and plant)

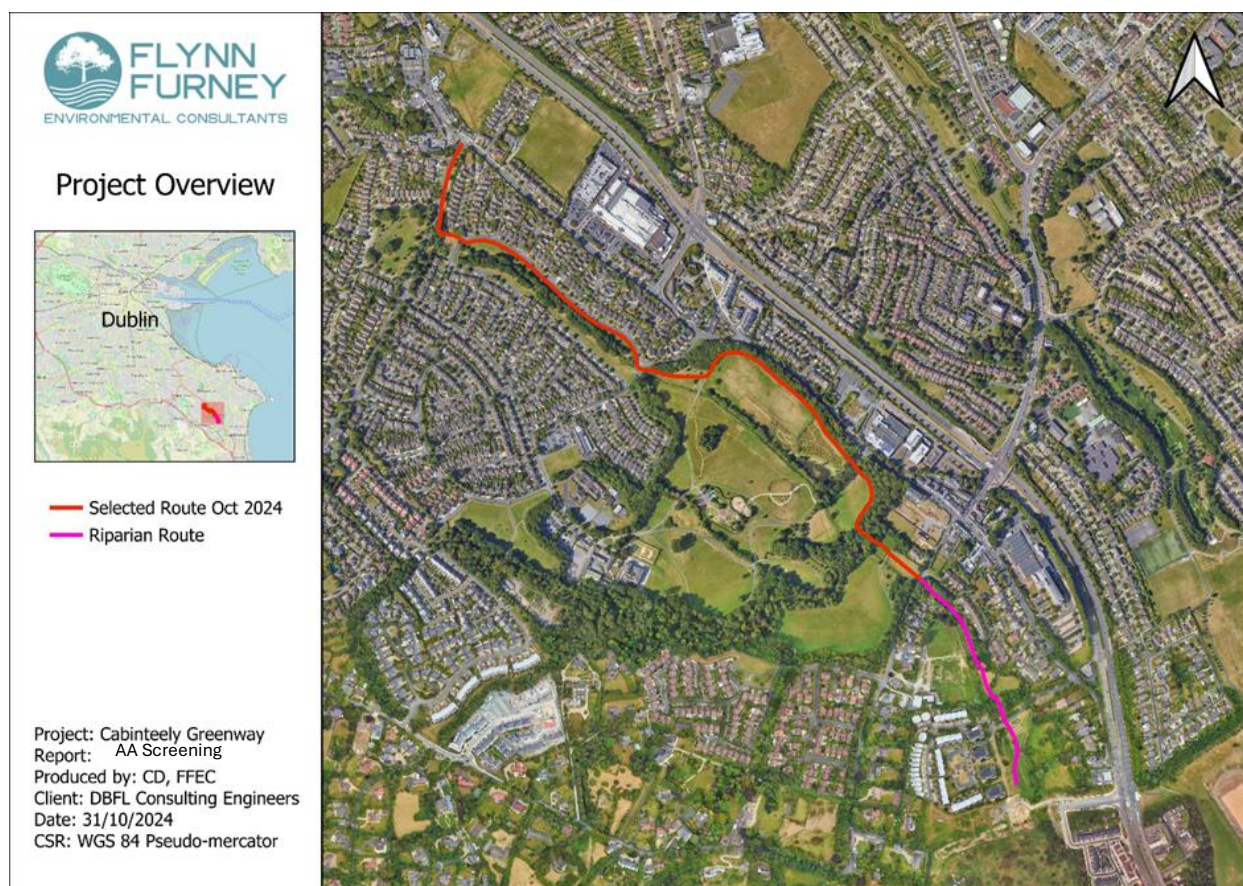


Figure 1: Cabinteely Greenway route from Cornelscourt to the Cherrywood Green Routes Network. Cabinteely Park and the Riparian route between Brennanstown Road and Brennanstown Avenue will receive new lighting columns.

1.6. Site location

The proposed route is located on what is primarily a mix of greenfield and built land. This corridor, which runs parallel to the Old Bray Road and generally follows the path of the Cabinteely Stream, traverses a

green corridor linking commercial/service centres at Cornelscourt and Cabinteely to the developing Cherrywood Strategic Development Zone (SDZ) and serves the growing residential population in the area.

A key feature of the route is its integration with Cabinteely Park, one of southern Dublin's most significant green spaces, spanning over 45 hectares. The park is characterised by a relatively high diversity of habitats for the area, including woodland, grassland, and wetland areas, which support a variety of flora and fauna. It is a popular recreational destination, offering amenities such as walking trails, a playground, and historical features like Cabinteely House, an 18th Century country house.

2. Identification of Relevant Natura 2000 Sites

2.1. SPR Model

This assessment was carried out using the source-pathway-receptor (SPR) approach, a standard tool in environmental assessment. The SPR concept in ecological impact assessment relates to the idea that for the risk of an impact to occur, a source is needed (e.g. a development site); an environmental receptor is present (e.g. a lake); and a pathway exists between the source and the receptor (e.g. a watercourse linking the development site to the lake).

Even though there might be a risk of an impact occurring, that does not necessarily mean that it will occur, and even if it does occur, it may not be significant. Identification of a risk means that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the receptor.

In this instance, the most relevant receptors are any Natura 2000 Sites with connectivity to the proposed works. These were considered during the desktop study stage of this assessment to assess the potential for significant effects upon their QIs and COs.

2.2. Works, Site Characteristics & Risks to the Environment

This section outlines the specific risks and characteristics associated with the proposed work site. It identifies potential environmental and ecological challenges inherent to the site, including its physical layout, proximity to sensitive habitats, and hydrological conditions. By understanding these factors, the assessment highlights areas where construction activities may pose risks to local biodiversity, water quality, or habitat integrity.

Table 3: Potential Impacts, Effects and their zone of influence

Potential impact resulting from proposed development	Potential effect	Zone of Influence

Land use change.	Permanent loss of habitat or niches for QI, or supporting, species.	Lands within, adjacent, or connected to the proposed footprint of works and access routes to these developments.
Changes in water quantity, distribution and quality from pollution or land use change.	Reduction in quality or loss of aquatic habitats.	Surface/ground water within, adjacent, or connected to the proposed footprint of works and access routes to these developments
Changes in levels of noise, dust, vibration, and/or human presence resulting from the construction and/or operation phases.	Increased environmental disturbance that disrupts the natural behaviour, habitat use, or ecological functioning of QI species.	Assessed for QI species for relevant Natura 2000 Site(s) within, adjacent, or connected to the proposed footprint of works and access routes to these developments
The spread of invasive species resulting from works involving vegetation, water and soil.	Permanent habitat/niche loss resulting from the spread of invasive species.	Assessed based on the presence of invasive species within, adjacent, or connected to the proposed footprint of works and access routes to these developments, as well as their potential to spread.

2.3. Nearby Natura 2000 Sites

Though a 15 km zone of influence (ZOI) is now considered outdated as some impacts may still extend beyond this, it remains useful as a heuristic for determining the actual ZOI. Within fifteen kilometres of the project, there are 18 Natura 2000 Sites (figure 2), some of which can be ruled out immediately due to a clear topographical separation and lack of hydrological connectivity as they are in separate river basins. The remaining sites have some, albeit very limited, hydrological connectivity to the proposed project via its connection to the sea by way of Cabinteely Stream (figure 3). The list of sites considered for further investigation are discussed below in section 2.4.

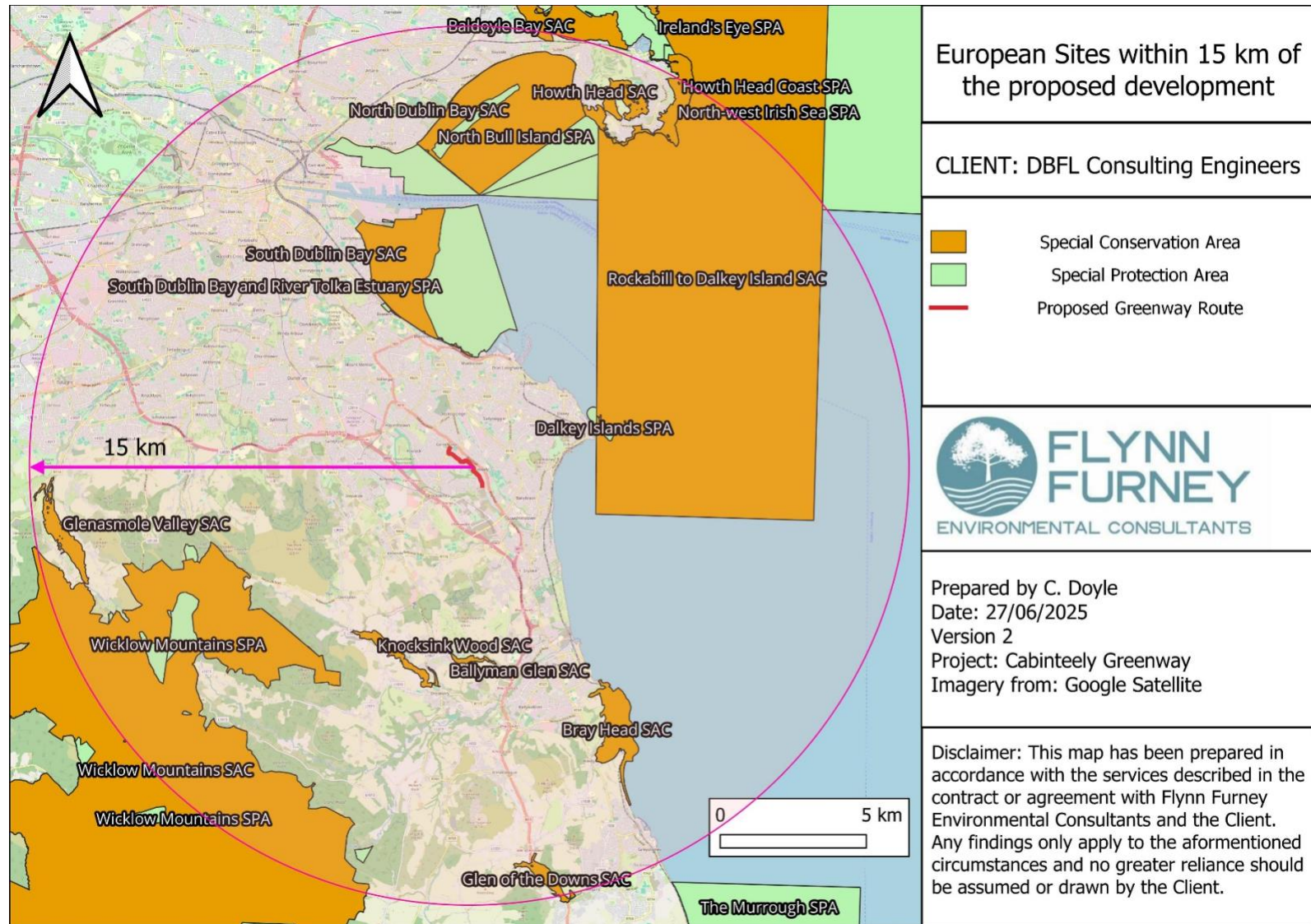


Figure 2: Overview of Natura 2000 Sites near the project.

As the proposed project is not situated within any Natura 2000 Sites, any potential impacts would need to be carried from the development footprint via land, air or water, or to a Site, or to any ex-situ/mobile QIs (e.g. habitats outside of, but still connected to, those within an SAC, or birds that can range beyond the borders of their SPA) relevant to that Site.

2.3.1. Connections via Land, Air and Water

The land between the proposed development and any Natura 2000 Sites is almost entirely urban, with most of the land cover being artificial surfaces, though some areas of amenity grassland, parkland and woodland can be found in places. As such, there is no conceivable overland pathway for any impact sources to any Sites. The grassland within the footprint of the proposed development may however be visited by some mobile QI species, and this is discussed further below.

Impact pathways via air are also discounted, as the magnitude of airborne pollution that would need to be generated by the proposed development in order to reach the nearest Natura 2000 Site is far beyond that which could potentially be generated by either the construction or operation phases.

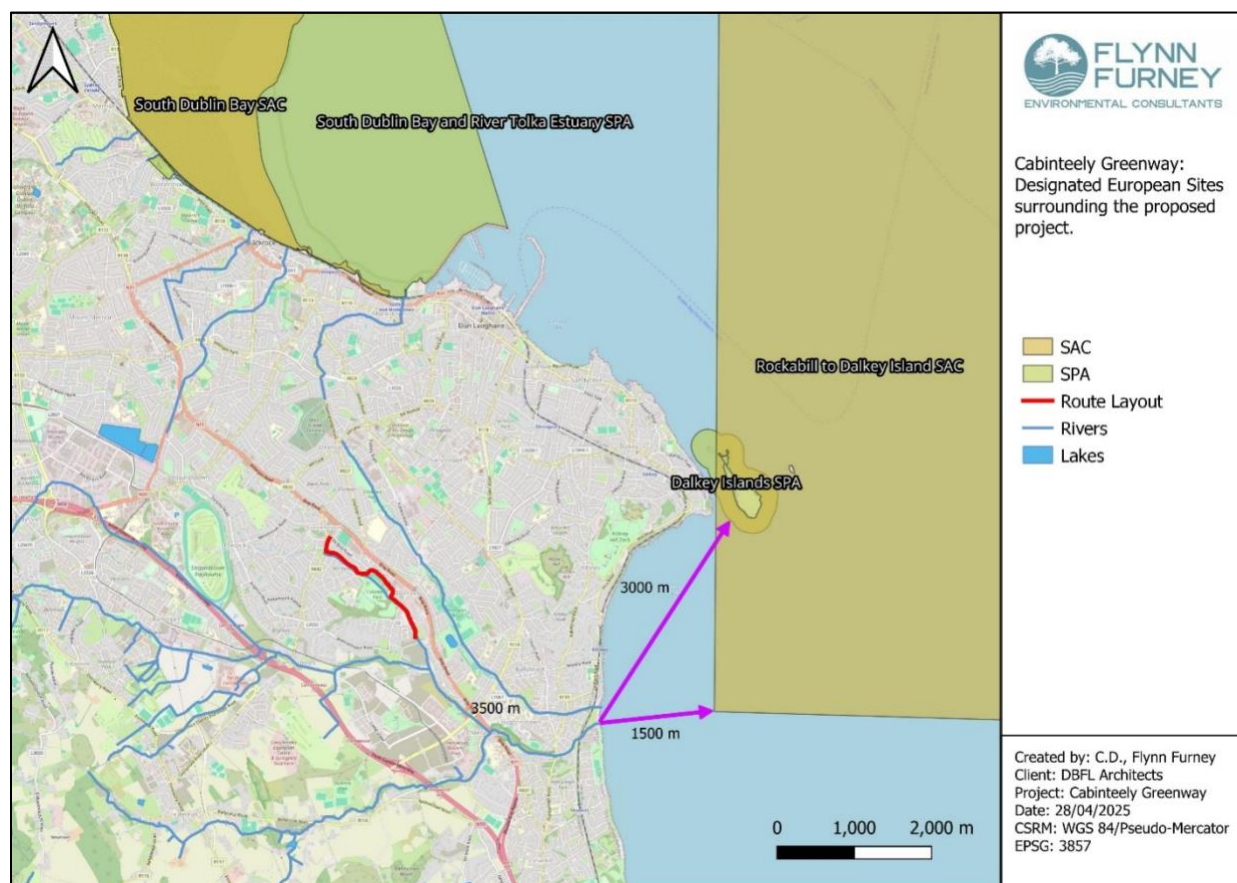


Figure 3: Hydrological connectivity of the site to Natura 2000 Sites. The south end of the project is 5,000 m removed from the edge of the Rockabill to Dalkey Island SAC and 6,500 m removed from the Dalkey Islands SPA via the Cabinteely Stream's connection to Killiney Bay.

Much of the proposed development runs parallel to Cabinteely Stream (EPA code: 10C05), which is hydrologically connected to Killiney Bay and from there diffuses to any Sites that are connected by the Irish Sea. The stream is recorded as having “Good Ecological Status or Potential” under the Water Framework Directive based on its Invertebrate Status (SW 2016-2021). The stream has been deemed “Not at Risk”.

The groundwater vulnerability (the ease with which infiltrating water and potential contaminants may reach groundwater in a vertical or sub-vertical direction) for the area of the project is recorded on the GSI map portal as being “moderate”, meaning it has natural characteristics that mean it has moderate vulnerability to contamination by human activities. Again, considering the nature of the proposed development, the potential for pollution, and the kinds of groundworks involved, no impacts to the local groundwater are predicted.

In terms of distance to the nearest Natura 2000 Sites, the southern end of the development where the new bridge will be constructed over the Cabinteely Stream is 6.5 km removed from the Dalkey Islands SPA and 5 km from the Rockabill to Dalkey Island SAC. The Bray Head SAC and the South Dublin Bay SAC, along with many other sites along the east coast, are also connected to Killiney Bay via the Irish Sea. Considering together the potential magnitude of waterborne pollutants that could be generated by the proposed development (i.e. the total amount of sand, soil, stone, hydrocarbons and cementitious material lost to the Cabinteely Stream during construction in a worst-case scenario) and the dilution factor from the kilometres of sea, direct impacts upon the water quality in any of these coastal Natura 2000 Sites are considered to be negligible.

For the sake of appropriate due diligence, the closest two sites, the Rockabill to Dalkey Island SAC and the Dalkey Islands SPA will be assessed below for likely significant effects (LSEs). Should no LSEs be found for either of these two sites based on hydrological connectivity, it will be assumed that there will be no LSEs on water quality for any other coastal SACs or SPAs that are further away.

As such, the following Natura 2000 Sites will be assessed for impacts to water quality:

- Dalkey Islands SPA
- Rockabill to Dalkey Islands SAC

2.3.2. Mobile QIs

There are several Natura 2000 Sites with bird species that could practically range within the ZOI of the proposed development. The Wicklow Mountains SPA is discounted due to the 8 km distance between the proposed development and the border of the Site, as its two QI species, Merlin (*Falco columbarius*) and Peregrine (*Falco peregrinus*), rarely forage for prey beyond 5 and 6 km of their nesting sites, respectively (NPWS, 2024a). If foraging habitat for any other of these QI bird species is present within the ZOI of the proposed development, impacts upon said habitat may lead to indirect impacts upon these SPAs. As such the following Sites will be assessed for impacts to their QI species:

-
- South Dublin Bay and River Tolka Estuary SPA
 - Dalkey Islands SPA
 - North Bull Island SPA
 - North Dublin Bay SAC
 - North-West Irish Sea SPA
 - Rockabill to Dalkey Island SAC
 - South Dublin Bay and River Tolka SAC
 - Howth Head Coast SPA

2.4. COs and QIs of Relevant Natura 2000 Sites

Table 4 below lays out the Natura 2000 Sites considered above as well as their QIs and COs and makes a reasoned determination on why they are/are not considered further in this screening assessment.

Table 4: Natura 2000 Sites, their qualifying interest, conservation objectives and whether there is potential for impacts from the proposed development.

Site Name, Code and Distance	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Potential for Impact
South Dublin Bay and River Tolka Estuary SPA [004024] ~ 3.5 km	• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Ringed Plover (<i>Charadrius hiaticula</i>) [A137] • Grey Plover (<i>Pluvialis squatarola</i>) [A141] • Knot (<i>Calidris canutus</i>) [A143] • Sanderling (<i>Calidris alba</i>) [A144] • Dunlin (<i>Calidris alpina</i>) [A149] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Redshank (<i>Tringa totanus</i>) [A162] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Roseate Tern (<i>Sterna dougallii</i>) [A192] • Common Tern (<i>Sterna hirundo</i>) [A193] • Arctic Tern (<i>Sterna paradisaea</i>) [A194]	To maintain the favourable conservation condition of the QI bird species in South Dublin Bay and River Tolka Estuary SPA (NPWS, 2015a).	There is no significant connectivity between this Site and the proposed development and no land take from within the footprint of the site, however it is considered as it is designated for mobile QI species. No typical supporting habitat for the QI species listed here exists within the ZOI of the proposed development, as the majority are coastal waders or sea birds, however they may still pass through the site. Light-bellied Brent Geese may range beyond the boundary of the SPA to forage in inland grasslands, the likes of which are present in Cabinteely Park. This site will be assessed further.

	Wetland and Waterbirds [A999]		
South Dublin Bay SAC [000210] ~4.1 km	- Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - Salicornia and other annuals colonising mud and sand [1310] - Embryonic shifting dunes [2110]	To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in South Dublin Bay SAC (NPWS, 2013a).	The proposed development site is located at a significant distance from the SAC and lacks any significant hydrological or ecological connectivity with the protected site. As such, potential impacts on the SAC can be confidently ruled out.
Rockabill to Dalkey Island SAC [003000] ~4.2km	- Reefs [1170] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	To maintain the favourable conservation condition of Reefs & Harbour porpoise in Rockabill to Dalkey Island SAC (NPWS, 2013b).	Theoretical hydrological connectivity exists (~4.7 km); however, the distance of the works from the site, the dilution potential within the Irish Sea, and the relatively small scale and nature of the proposed works would render any potential impacts negligible. Harbour Porpoise may range beyond the boundary of the SAC, however the dilution factor of any pollutants entering Killiney Bay in a worst-case spill is still believed to be negligible. As such, potential impacts on the SAC

			can be confidently ruled out.
Dalkey Island SPA [004172] ~4.5 km	• Roseate Tern (<i>Sterna dougallii</i>) [A192] • Common Tern (<i>Sterna hirundo</i>) [A193] • Arctic Tern (<i>Sterna paradisaea</i>) [A194]	To restore the Favourable conservation condition of Roseate Tern, Common Tern & Arctic Tern in Dalkey Islands SPA (NPWS, 2024b).	The proposed development is located in an urban area surrounded by parkland and a river, which does not provide the coastal or offshore habitats required by any of the listed Tern species. These species depend on marine environments and undisturbed coastal nesting sites, conditions that are absent within the proposed development area. Hydrological connectivity exists at a distance of approximately 6.5 km, however, the distance of the works from the site, the mixing potential within the Irish Sea, and the relatively small scale and nature of the proposed works would render any potential impacts negligible. As such, potential impacts on the SPA can be confidently ruled out.

North Dublin Bay SAC [000206] ~9 km	• Mudflats and sandflats not covered by seawater at low tide [1140] • Annual vegetation of drift lines [1210] • Salicornia and other annuals colonising mud and sand [1310] • Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Embryonic shifting dunes [2110] • Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] • Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] • Humid dune slacks [2190] • <i>Petalophyllum ralfsii</i> (Petalwort) [1395]	To maintain the favourable conservation condition of the QI habitats & species in North Dublin Bay SAC (NPWS, 2013c).	The proposed development site is located at a significant distance from the SAC and lacks any significant hydrological or ecological connectivity with the protected site. As such, potential impacts on the SAC can be confidently ruled out.
North-West Irish Sea SPA [004236] ~9 km	• A001 Red-throated Diver (<i>Gavia stellata</i>) • A003 Great Northern Diver (<i>Gavia immer</i>) • A009 Fulmar (<i>Fulmarus glacialis</i>) • A013 Manx Shearwater (<i>Puffinus puffinus</i>) • A017 Cormorant (<i>Phalacrocorax carbo</i>) • A018 Shag (<i>Phalacrocorax aristotelis</i>) • A065 Common Scoter (<i>Melanitta nigra</i>) • A177 Little Gull (<i>Larus minutus</i>) • A179 Black-headed Gull (<i>Chroicocephalus</i>	To maintain the favourable conservation condition of the QI habitats & species in North-West Irish Sea SPA (NPWS, 2023).	There is no significant connectivity between this Site and the proposed development and no land take from within the footprint of the site, however it is considered as it is designated for mobile QI species. No typical supporting habitat for the majority of QI species listed here exists within the ZOI of the proposed development, as the majority are coastal

	<i>ridibundus</i>) • A182 Common Gull (<i>Larus canus</i>) • A183 Lesser Black-backed Gull (<i>Larus fuscus</i>) • A184 Herring Gull (<i>Larus argentatus</i>) • A187 Great Black-backed Gull (<i>Larus marinus</i>) • A188 Kittiwake (<i>Rissa tridactyla</i>) • A192 Roseate Tern (<i>Sterna dougallii</i>) • A193 Common Tern (<i>Sterna hirundo</i>) • A194 Arctic Tern (<i>Sterna paradisaea</i>) • A195 Little Tern (<i>Sterna albifrons</i>) • A199 Guillemot (<i>Uria aalge</i>) • A200 Razorbill (<i>Alca torda</i>) • A204 Puffin (<i>Fratercula arctica</i>)		and wetland waders or sea birds. Again, mobile QIs may pass through the site. Black Headed Gull, Herring Gull and Common Gull may be found inland in urban areas; however, the footprint of the proposed greenway does not have any habitats that are essential for their breeding or foraging. As such, this SPA will not be assessed further.
North Bull Island SPA [004006] ~11 km	• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] • Shelduck (<i>Tadorna tadorna</i>) [A048] • Teal (<i>Anas crecca</i>) [A052] • Pintail (<i>Anas acuta</i>) [A054] • Shoveler (<i>Anas clypeata</i>) [A056] • Oystercatcher (<i>Haematopus ostralegus</i>) [A130] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Grey Plover (<i>Pluvialis squatarola</i>) [A141] • Knot (<i>Calidris canutus</i>) [A143] • Sanderling (<i>Calidris alba</i>) [A144]	To maintain the favourable conservation condition of the QI bird species in South Dublin Bay and River Tolka Estuary SPA (NPWS, 2015).	There is no significant connectivity between this Site and the proposed development and no land take from within the footprint of the site, however it is considered as it is designated for mobile QI species. No typical supporting habitat for the QI species listed here exists within the ZOI of the proposed development, as the majority are coastal and wetland waders or sea birds. Again, mobile QIs may pass

	• Dunlin (<i>Calidris alpina</i>) [A149] • Black-tailed Godwit (<i>Limosa limosa</i>) [A156] • Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] • Curlew (<i>Numenius arquata</i>) [A160] • Redshank (<i>Tringa totanus</i>) [A162] • Turnstone (<i>Arenaria interpres</i>) [A169] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Wetland and Waterbirds [A999]		through the site. Light-bellied Brent Geese may range beyond the boundary of the SPA to forage in inland grasslands, the likes of which are present in Cabinteely Park. This site will be assessed further.
Howth Head Coast SPA [004113] ~ 12 km	• A188 Kittiwake (<i>Rissa tridactyla</i>)	To restore the Favourable conservation condition of Kittiwake in Howth Head Coast SPA.	No typical supporting habitat for the QI species listed here, namely cliff ledges of offshore islands, sea stacks, or along inaccessible areas of coastal mainland, exists within the ZOI of the proposed development (NPWS, 2024c). As such, potential impacts on the SPA can be confidently ruled out.

The above table highlights that there is potential for impacts upon QI species of the following Natura 2000 Sites:

- South Dublin Bay and River Tolka Estuary SPA
- North Bull Island SPA

A more thorough assessment of potential impacts and the likelihood of significant effects is given in section 4.

3. Assessment of Likely Significant Effects

3.1. Desk Study

A desktop study was carried out as part of this screening process which included a review of available literature on the site and its immediate environs to determine whether any QI species or habitats have been recorded within the footprint of the proposed development. The following sources of data were accessed:

- Environmental Protection Agency (EPA) Appropriate Assessment Tool
- EPA Maps (to identify watercourses, hydrology and Natura 2000 Site boundaries)
- NPWS protected species database and online mapping
- National Biodiversity Data Centre
- Inland Fisheries Ireland
- An Bord Pleanála's online database
- Dun Laoghaire-Rathdown County Council's own biodiversity data

3.1.1. Protected Species Records - National Biodiversity Centre

Records from the National Biodiversity Data Centre (NBDC) for 2 km grid square SO22H were downloaded and assessed for the presence of Light-Bellied Brent Goose, though any records of the other QI species listed above would be noted. The results are presented in table 5 below.

Table 5: NBDC records of QI species in proximity to the proposed project site.

Species	Record Count	Date of last record	Title of Datasheet	Protection
Black-headed Gull (<i>Larus ridibundus</i>)	12	16/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Brent Goose (<i>Branta bernicla</i>)	1	10/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Eurasian Oystercatcher (<i>Haematopus ostralegus</i>)	3	16/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
European Golden Plover (<i>Pluvialis apricaria</i>)	1	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List

Peregrine Falcon (<i>Falco peregrinus</i>)	1	23/11/2010	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
--	---	------------	------------------	--

Black-headed Gull, Oystercatcher, Golden Plover and **Peregrine** are all QIs for the abovementioned Natura 2000 Sites. **Brent Goose** (*Branta bernicla*) is not a QI, but it has a similar ecological niche to the **Light-bellied Brent Goose** and so could be indicative of supporting habitat.

3.1.2. Protected Species Records – DLR Internal Data

To support this screening assessment, Dún Laoghaire-Rathdown County Council (DLR CoCo) has granted access to their internal biodiversity records. These records were reviewed to determine whether any QI species or habitats have been previously identified within, or with connection to, the proposed development area. It is noted that, as per their terms for use of this data, DLR CoCo makes no guaranteed as to the accuracy, timeliness or completeness of any of the data. DLR CoCo shall have no liability for the data (or lack thereof), for any decisions made, or actions taken (or not taken) based upon any of the data provided.

Some of the provided ecology datasets have been collated since 2008, with desktop review and some ground truthing, providing ecological updates in more recent years. However, these datasets are **not exhaustive** and ecological surveys/data collection are ongoing across the County. Therefore, care has been taken to ensure that the most up-to-date ecological data collection and field surveys relevant to the requirements of this project have also been carried out.

Data on protected species such as Badger setts, Otter holts, rare plants etc., will be kept confidential and is provided only for the purposes of understanding where protected species require consideration in the plan or project, the details of which will not be shared publicly or with others.

The records reviewed included:

- GIS data from a study on Light-bellied Brent Geese (LBBG) by the University of Exeter (2020) showed feeding grounds within nearby Clonkeen College pitches and Seapoint Rugby club but no evidence of use of grasslands within the project footprint. This study was not exhaustive however, and lack of evidence does not mean that no LBBG are present within Cabinteely Park, only that feeding was confirmed at Clonkeen and Seapoint.
- GIS data from a survey by Triturus (2022) show evidence that Otter is using the Cabinteely stream and Cabinteely Park Pond. Otters are an Annex I Species of the Habitats directive which requires the designation of an SAC. However, no SACs designated for this species were found within the footprint of the proposed development, nor is it considered to be connected to any SACs designated for this species (Section 2.3.). Potential impacts upon their ecology are considered in detail in the associated Ecological Impact Assessment for this project.
- GIS data for tufa spring records in DLR by Denyer Ecology (2023) showed no overlap of known tufa

spring locations and the project footprint, however Cabinteely Park was not surveyed as part of this study. Field surveys carried out to support this report looked for signs of tufa forming/petrifying spring, though none were found within the zone of influence of the proposed project.

3.2. Site Visit & Ecological Survey

A walkover survey was carried out in February 2024. The main field surveys were carried out in April 2024. 2011. The primary floral and habitat walkover survey was undertaken on 27th June 2024. Baseline ecological conditions were assessed according to Smith et al. (2011) and habitats were classified according to Fossitt (2000).

Invasive species listed on Schedule 1¹ of the Birds and Natural Habitats Regulations 2011 were also recorded during site visits and were surveyed for using the National Biodiversity Data Centre handbook on Invasive Species.

Mammal surveys were undertaken in January 2024 as per NRA guidelines (2009).

Wintering Bird Surveys were undertaken in January 2025 with guidance from the JNCC (2004) and the UK Bird Survey Guidelines website. The survey was carried out by L. Mac Elwaine during high tide, when birds are more likely to be found inland.

3.2.1. Habitats

GA2 - Amenity Grassland

The most common habitat type by area, amenity grassland can be found along the entire length of the route. While grasses dominate, occasional other common species like Dandelion (*Taraxacum officinalis*), Clovers (*Trifolium spp.*), Docks (*Rumex spp.*) and Daisies (*Bellis perennis*) were frequent. Some areas appear to have been left to grow long and have not been mowed in more than one year. Some of these areas tend more towards neutral grassland.

GS1 - Neutral & Calcareous Grassland

Dry calcareous and neutral grassland may comprise a wide range of grasses and broadleaved herbs. Species richness varies and can be high. Typical grasses recorded include bents (*Agrostis spp.*), meadowgrasses (*Poa spp.*), Meadow Foxtail (*Alopecurus pratensis*), Cock's-foot (*Dactylis glomerata*),

¹ The classification of invasive species in Ireland under the *European Communities (Birds and Natural Habitats) Regulations 2011*. Species previously listed in the *Third Schedule Regulation (EU) No 1143/2014* are now referred to under the First Schedule, following amendments to align national legislation with *On Invasive Alien Species. S.I. No. 374/2024 - European Union (Invasive Alien Species) Regulations 2024*.

Yorkshire-fog (*Holcus lanatus*) and Perennial Ryegrass (*Lolium perenne*) may also be present but should not dominate the sward. The herb community included Clovers, Yarrow (*Achillea millefolium*), Common Knapweed (*Centaurea nigra*), Selfheal (*Prunella vulgaris*), Plantains (*Plantago* spp.), Common Bird's-foot Trefoil (*Lotus corniculatus*), Hairy Bittercress (*Cardamine hirsuta*) in wetter areas, and Oxeye Daisy (*Leucanthemum vulgare*).

The area of grassland north of the pond has been planted with a wildflower mix and had a higher diversity than other areas, including Field Scabious (*Knautia arvensis*) as well as several Apple (*Malus domestica*) trees. Certain areas of amenity grassland have been left for long enough that they have fallowed and grown tall, with a herb make-up suggesting neutral grassland (and sometimes more calcareous) in several areas within the park.

On the south side of the stream within the park, many Orchids were found within the grassland that had been left to grow, including Heath Spotted Orchid (*Dactylorhiza maculata*), possibly other *Dactylorhiza* species, and a type of Marsh Orchid (*Dactylorhiza* sp.), though ground conditions were largely dry. Presence of Marsh Orchid can also indicate Wet Grassland (GS4); however, ground conditions were dry at the time of survey. The grassland here can occasionally hold water when it rains.

FL8 - Artificial Lakes and Pond

This category is used for artificial or ornamental bodies of standing water that found in parks, demesnes, gardens or golf courses. Cabinteely Park Pond falls into this category of a mesotrophic waterbody, with small patches of algae and waterweeds visible. Tall herbs like Wild Angelica, Flag Iris and Bulrush (*Scirpoides holoschoenus*) were all present at the fringes of the pond, thus the fringes perhaps align more with tall herb swamp, as it is classified on the All-Ireland Wetland Survey Maps.

Cabinteely Park Pond is listed on the AIWS map viewer, described as: “Ornamental pond in former demesne, with exotic planting along edge. Wildflower meadow planted to north of pond with numerous trees of 6 types of apple, and various pear and plum varieties. Tall herb swamp and reedswamp occur on the margins of the pond. Open to public.” It has been assigned low conservation value.

Significance of Habitats

GA2 - Some areas of improved amenity grassland where Light-bellied Brent Goose may feed were identified within Cabinteely Park.

GS1 - Calcareous grasslands with either high numbers or diversity of orchids correspond to the priority Annex (QI) habitat, “semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometea*) (*important orchid sites) (6210)”. The calcareous grassland recorded was outside of the project footprint, nor is it ex-situ QI habitat for any of the abovementioned Natura 2000 Sites.

FL8 - Tall-herb swamps can include pockets of the Annex (QI) habitat “hydrophilous tall herb fringe

communities of plains and of the montane to alpine levels (6430)". However, this habitat does not contain any of the indicator species for this Annex habitat.

A second pond is present towards the eastern end of the route where the greenway meets Brennanstown Avenue. This pond could not be fully surveyed as it is surrounded by a dense ring of woodland. This pond is not in the direct route of the greenway; however, the route does run within c. 10 m of the edge of the woodland. Regardless, "hydrophilous tall herb fringe communities of plains and of the montane to alpine levels" are not ex-situ QI habitats for any of the abovementioned Natura 2000 Sites.

3.2.2. Invasive species

Several invasive plant species were encountered during the survey.

Low impact: New Zealand Flax (*Phormium tenax*), Butterfly Bush.

Medium impact: Winter Heliotrope (*Petasites pyrenaicus*), Montbretia (*Crocasmia x crocosmiiflora*), Old Man's Beard (*Clematis vitalba*) and Himalayan Honeysuckle (*Leycesteria formosa*).

High impact: Cherry Laurel (*Prunus laurocerasus*).

First Schedule: Giant Hogweed, Three-Cornered Leek, and American Skunk Cabbage.

Of these, Winter Heliotrope was the most abundant and widespread. Butterfly Bush and Montbretia occurred occasionally throughout. Old Man's Beard was found outside the project footprint on Carrig Glen Road. Cherry Laurel can be found in the woodland areas throughout, in particular in a hedge along the north side of the park.

American Skunk Cabbage and Three-cornered Leek were concentrated around Glen Lawn Drive. Evidence of Giant Hogweed (*Heracleum mantegazzianum*) was identified at the southeastern end of the proposed route, marked by a sign indicating prior chemical treatment. While no new leaves or emerging plants were observed in the vicinity of the treatment site, it is highly likely that the soil remains contaminated due to the plant's prolific seed production and the long viability of its seeds in the soil. Anecdotal evidence of Japanese Knotweed (*Fallopia japonica*) was given prior to the survey, however no records of Japanese Knotweed in the immediate area were found during the desk study and no evidence of the plant was found during the field survey.

Appropriate management of these species will be required where the route intersects with their distribution, however there are no pathways for their spread to any of the abovementioned Natura 2000 Sites.

3.2.3. Wintering Birds

High-tide surveys were carried out across 2 no. days in January (13th and 14th) across 4 no. locations within the park. Vantage Point locations and recorded data is given in Appendix I.

Birds heard and seen during surveys were common species, typical of the habitat types. No QI species were observed using the site.

3.3. Natura 2000 Sites with the Potential to be Significantly Affected by the Proposed Development

Section 3 has identified two SPAs as requiring further consideration in this assessment. The remaining Natura 2000 Sites are at a greater remove and/or have no identifiable connectivity with the proposed works. Given the nature and scale of the works, the identified sources and pathways are not considered to be significant for direct impacts upon any Natura 2000 Site. The two Sites which will be considered further and discussed in this section are:

- South Dublin Bay and River Tolka Estuary SPA [004024] ~ 3.5 km
- North Bull Island SPA [004006] ~11 km

3.3.1. South Dublin Bay and River Tolka Estuary SPA [004024]

This section describes the qualifying interests of the South Dublin Bay & River Tolka Estuary and investigates the potential for impacts.

Table 6: Assessment of potential impacts.

Qualifying Interest	Potential for Impacts	Rationale
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]	Low to Moderate	While Brent Geese are primarily associated with coastal habitats such as intertidal mudflats for feeding on eelgrass (<i>Zostera</i> spp.) and green algae, they are also known to forage inland on grasslands come mid-winter, particularly amenity grasslands in urban and suburban areas (Robinson et al. 2004). If the proposed development overlaps with or disrupts grasslands used by Brent Geese for foraging, there could be temporary to long-term displacement impacts.
Oystercatcher (<i>Haematopus ostralegus</i>) [A130]	Low	Oystercatchers prefer coastal habitats, particularly intertidal zones with access to shellfish. They also occasionally feed on grasslands where they prey on Tipulid larvae and earthworms. Loss of grassland habitat may reduce foraging opportunities in this area.

Ringed Plover (<i>Charadrius hiaticula</i>) [A137]	None	This species relies on sandy or gravelly coastal areas for nesting and feeding, which are absent in the proposed development site.
Grey Plover (<i>Pluvialis squatarola</i>) [A141]	None	Grey Plover is associated with tidal flats and estuarine habitats. The proposed development is unlikely to overlap with their primary habitats.
Knot (<i>Calidris canutus</i>) [A143]	None	Knot exclusively forages on intertidal mudflats and coastal habitats. The proposed development is unlikely to overlap with their primary habitats.
Sanderling (<i>Calidris alba</i>) [A144]	None	This species depends on sandy coastal areas and intertidal zones. The proposed development is unlikely to overlap with their primary habitats.
Dunlin (<i>Calidris alpina</i>) [A149]	None	Dunlin forages on mudflats and marshy coastal habitats. The proposed development is unlikely to overlap with their primary habitats.
Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]	None	While Bar-tailed Godwits are known to occasionally use agricultural or grassland areas as stopover sites during migration, this behaviour is uncommon and usually occurs in coastal regions. In an urban parkland setting, the likelihood of Bar-tailed Godwits using grasslands for foraging is very low due to the lack of suitable prey. The proposed development is unlikely to overlap with their primary habitats.
Redshank (<i>Tringa totanus</i>) [A162]	None	Redshank are associated with wetlands and tidal mudflats. Although the river may provide limited habitat, the scale and nature of the works are unlikely to have significant impacts.
Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]	None	Black-headed Gulls are highly adaptable and often forage in urban and semi-urban settings. The project's small scale and limited disruption to open feeding areas reduces the likelihood of impacts. Though likely present around the proposed development footprint, impacts would be negligible as no

		significant wetland degradation will occur.
Roseate Tern (<i>Sterna dougallii</i>) [A192], Common Tern (<i>Sterna hirundo</i>) [A193], Arctic Tern (<i>Sterna paradisaea</i>) [A194]	None	These tern species rely on coastal and marine environments for feeding and breeding. The proposed development is unlikely to overlap with their primary habitats.
Wetland and Waterbirds [A999]	None	This group represents a broad range of species using wetlands and estuaries. Impacts could occur if the proposed development leads to wetland disturbance or hydrological changes, but significant connectivity has been ruled out in Section 2.

3.3.2. North Bull Island SPA [004006]

This section describes the qualifying interests of North Bull Island SPA and investigates the potential for impacts.

Table 6: Assessment of potential impacts.

Qualifying Interest	Potential for Impacts	Rationale
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]	Low to Moderate	While Brent Geese are primarily associated with coastal habitats such as intertidal mudflats for feeding on eelgrass (<i>Zostera</i> spp.) and green algae, they are also known to forage inland on grasslands come mid-winter, particularly amenity grasslands in urban and suburban areas (Robinson et al. 2004). If the proposed development overlaps with or disrupts grasslands used by Brent Geese for foraging, there could be temporary to long-term displacement impacts.
Oystercatcher (<i>Haematopus ostralegus</i>) [A130]	Low	Oystercatchers prefer coastal habitats, particularly intertidal zones with access to shellfish. They also occasionally feed on grasslands where they prey on tipulid larvae and earthworms. Loss of grassland habitat may reduce foraging

		opportunities in this area.
Shelduck (<i>Tadorna tadorna</i>) [A048]	None	Shelducks forage primarily in intertidal mudflats and estuaries, feeding on invertebrates in shallow waters. The proposed development is unlikely to overlap with their primary habitats.
Teal (<i>Anas crecca</i>) [A052]	None	Teal are associated with shallow wetlands and brackish areas where they forage for aquatic plants and invertebrates. The proposed development is unlikely to overlap with their primary habitats.
Pintail (<i>Anas acuta</i>) [A054]	None	Pintails frequent coastal lagoons and shallow wetlands, relying on plant material and invertebrates. The proposed development is unlikely to overlap with their primary habitats.
Shoveler (<i>Anas clypeata</i>) [A056]	None	Shovelers are filter feeders in shallow wetlands. The proposed development is unlikely to overlap with their primary habitats.
Golden Plover (<i>Pluvialis apricaria</i>) [A140]	None	Golden Plovers utilise open fields and coastal grasslands for foraging in winter. The proposed development is unlikely to overlap with their primary habitats.
Grey Plover (<i>Pluvialis squatarola</i>) [A141]	None	Grey Plovers depend on intertidal flats for foraging. The proposed development is unlikely to overlap with their primary habitats.
Knot (<i>Calidris canutus</i>) [A143]	None	Knots forage on intertidal mudflats for molluscs. The proposed development is unlikely to overlap with their primary habitats.
Sanderling (<i>Calidris alba</i>) [A144]	None	Sanderlings feed on sandy beaches and intertidal zones. The proposed development is unlikely to overlap with their primary habitats.
Dunlin (<i>Calidris alpina</i>) [A149]	None	Dunlins forage in intertidal areas and are highly sensitive to disturbance. The proposed development is unlikely to overlap with their primary habitats.

Black-tailed Godwit (<i>Limosa limosa</i>) [A156]	None	Black-tailed Godwits forage in mudflats and wet grasslands. The proposed development is unlikely to overlap with their primary habitats.
Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]	None	Bar-tailed Godwits depend on intertidal zones for foraging. The proposed development is unlikely to overlap with their primary habitats.
Curlew (<i>Numenius arquata</i>) [A160]	None	Curlews forage in coastal grasslands and wetlands. The proposed development is unlikely to overlap with their primary habitats.
Redshank (<i>Tringa totanus</i>) [A162]	None	Redshanks utilise wetlands and estuaries for foraging. The proposed development is unlikely to overlap with their primary habitats.
Turnstone (<i>Arenaria interpres</i>) [A169]	None	Turnstones forage along rocky intertidal zones. The proposed development is unlikely to overlap with their primary habitats.
Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]	None	Black-headed Gulls are highly adaptable and often forage in urban and semi-urban settings. The project's small scale and limited disruption to open feeding areas reduces the likelihood of impacts. Though likely present around the proposed development footprint, impacts would be negligible as no significant wetland degradation will occur.
Wetland and Waterbirds [A999]	None	This group represents a broad range of species using wetlands and estuaries. Impacts could occur if the proposed development leads to wetland disturbance or hydrological changes, but significant connectivity has been ruled out in Section 2.

3.4. Investigation into the Likelihood of Significant Effects upon QI Species

3.4.1. Light bellied brent geese

Table 7: Conservation objectives for Light-bellied Brent Goose.

Conservation Objectives for : South Dublin Bay and River Tolka Estuary SPA [004024]

A046 Brent Goose *Branta bernicla hrota*

To maintain the favourable conservation condition of Light-bellied Brent Goose in South Dublin Bay and River Tolka Estuary SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Waterbird population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by light-bellied brent goose, other than that occurring from natural patterns of variation	Waterbird distribution from the 2011/2012 waterbird survey programme is discussed in part five of the conservation objectives supporting document

Ireland hosts a significant proportion of the Eastern High Arctic Light-bellied Brent Goose wintering population. Of these wintering areas, Dublin Bay hosts the largest numbers. Light-bellied Brent arriving in Dublin will typically forage on saltmarsh vegetation and *Zostera* eelgrass on estuaries for the first few weeks and months but come mid-winter the majority of the birds switch to feeding primarily on grass at amenity areas (Robinson et al. 2004, Inger et al. 2006). More than 100 inland or terrestrial grassland feeding sites have been identified around Dublin. Access to suitable resources is not only necessary for the health and survival of these geese in Ireland but is also known to impact their survival and breeding success after departure from these wintering grounds (Inger et al. 2010, Harrison et al. 2011).

A study by the university of Exeter in collaboration with the Irish Brent Goose Research Project (Handby et al., 2022) on behalf of DLR, FCC and DCC, collated two and a half winter seasons of data, collected between 2018 – 2020 with the aims to quantify patterns of habitat use by LBBG throughout the winter in Dublin. The most common habitat type used by LBBG in both seasons according to the top 20 site list is sports pitches (i.e. golf courses and playing fields) and school grounds. The results show that LBBG (except those roosting at the north end of North Bull Island) are generally avoiding urban green spaces and only using them when necessary. This is evidenced by the geese being recorded on urban green spaces proportionally less than would be expected given the availability of this type of site throughout the urban landscape.

Brent geese favour large open areas of regularly mowed amenity grassland: Benson (2009) reported that “the primary sites used by significant numbers of brent geese were at least the size of a football pitch” (approx. 0.7 ha). They typically avoid areas with high levels of human disturbance, particularly areas used regularly by dog walkers, as dogs are seen as potential predators.

Records used for this study were provided by DLR CoCo for the purpose of this assessment and noted nearby Seapoint Rugby Club and Kilbogget Park as important foraging grounds for the species.

While there is some potential for geese to occasionally forage in Cabinteely Park, their preference for short sward lengths and fertilised grasslands, combined with seasonal variations in grassland management within the park, makes it only marginally suitable as a foraging ground.

3.4.2. Oystercatcher

Table 8: Conservation Objectives for Oystercatcher.

Conservation Objectives for : South Dublin Bay and River Tolka Estuary SPA [004024]

A130 Oystercatcher *Haematopus ostralegus*

To maintain the favourable conservation condition of Oystercatcher in South Dublin Bay and River Tolka Estuary SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Population trend	Percentage change	Long term population trend stable or increasing	Population trends are presented in part four of the conservation objectives supporting document
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by oystercatcher, other than that occurring from natural patterns of variation	Waterbird distribution from the 2011/2012 waterbird survey programme is discussed in part four of the conservation objectives supporting document

Sports pitches, with their moist and soft soils, offer an abundant supply of earthworms, making them excellent feeding grounds for this species. Similarly, irrigated lawns in urban parks or golf courses can provide comparable conditions. However, frequent disturbances in these areas, such as human activity and pets, can deter birds from feeding consistently. In Cabinteely Park, sections of short grass and soft soils are present, but the high level of disturbance from walkers and dogs limits its suitability. Notably, there are no recorded instances of Oystercatchers feeding within the project area (NBDC).

3.5. Summary of Potential Impacts

The below table assesses whether there is the possibility of likely changes to the two Natura 2000 Sites considered for further assessment at the end of section 2.4 as a result of the proposed project.

Table 9: Assessment of possible changes to South Dublin Bay and River Tolka Estuary SPA and the North Bull Island SPA.

Reduction of habitat area	Disturbance of key species	Habitat or species fragmentation, reduction in species density	Changes in key indicators of Conservation value (i.e. water quality)
The proposed project does not	There is no potential for	QIs may be present within the study area but are not	Site drainage, surface water hydrochemistry,

overlap with a Natura 2000 Site, it does not intersect with any of the habitat types designated as protected under the regulatory framework of the site it will not result in the reduction of natural areas within the SPA boundaries mentioned.	protected species listed as QIs of this site to be impacted if they are using the site. The proposed project does not have the potential to have adverse impacts on key species.	present within the project footprint, or important foraging habitats for protected species. The proposed project will not result in any adverse impacts on key species in the absence of mitigation, including anticipated habitat or species fragmentation, or a reduction in species density.	hydrogeology, groundwater vulnerability, proximity to Natura 2000 Sites, receptor sensitivity, proposed infrastructure and site drainage were all considered. A conclusion has been drawn that the proposed project will not result in any changes in key indicators water quality which would impact the conservation value in the absence of mitigation.
---	--	---	--

3.6. Cumulative and/or In-Combination Effects with Other Plans and Projects

3.6.1. Regional and Local Plans

The Dún Laoghaire-Rathdown County Development Plan 2022-2028 interactive map was also reviewed for potential cumulative or in-combination effects. The route falls exclusively with Objective F zoning – “to preserve and provide for open space with ancillary active recreational amenities”.

Zone F permits the following development: Community Facilities, Cultural Use, Open Space, Sports Facilities, and Traveller’s Accommodation.

It also allows consideration of the following development: Allotments, Carparks, Cemeteries, Craft Centre/Craft Shop, Childcare Services, Crematoriums, Education, Garden Centres/Plant Nurseries, Golf Facilities, Guest Houses, Place of Public Worship, Public Services, Tea Rooms/Cafés.

“Where lands zoned F are to be developed then: Not more than 40% of the land in terms of the built form and surface car parking combined shall be developed upon. Any built form to be developed shall be of a high standard of design including quality finishes and materials. The owner shall enter into agreement with the Planning Authority pursuant to Section 47 of the Planning and Development Act 2000, as amended, or some alternative legally binding agreement restricting the further development of the remaining area (i.e. 60% of the site) which shall be set aside for publicly accessible passive open space or playing fields. Said space shall be provided and laid out in a manner designed to optimise public patronage of the residual open space and/or to protect existing sporting and recreational facilities which may be available for community use.”

The Dún Laoghaire-Rathdown County Biodiversity Action Plan 2021-2025 was reviewed for any possible actions in the local area that may interact with this project regarding impacts to any Natura 2000 Sites. The Plan is a high-level document that aims to restore and enhance biodiversity around the county and recognises that the urban environment poses a challenge to biodiversity and that in order to improve the landscape's resilience to climate change the provision of natural solutions to reduce carbon and manage flood risk, and to sustain vital ecosystems, such clean water and clean air will be necessary. One of the aims of the plan is "reconnection", which implies the reconnection of people with nature. Proposed actions under this aim include the development of best practice guidelines for Greenway Developments (Action 2.9) and the development of guidelines managing artificial lighting (Action 2.11) which are applicable to the proposed development.

These actions support this development, and it is not believed that they will lead to changes to the proposed project or the environment around it in a way that would lead to cumulative or in-combination effects.

Dún Laoghaire-Rathdown County Council Climate Action Plan 2024-2029 has similar high-level goals, such as the reduction of carbon emissions and the building of resilience in new and existing developments. It too supports the proposed development as it will promote low-carbon active travel for people of all ages by connecting residential neighbourhoods to a high-quality recreational destination in Cabinteely Park as well as will providing a safe route to St. Brigid's school. As with the Biodiversity Action Plan, this plan is not expected to lead to changes that would cause in-combination or cumulative effects upon Natura 2000 Sites with the proposed greenway.

The BusConnects Dublin Network Redesign and **the Greater Dublin Area Cycle Network Plan 2022** were also considered and were also found to support the proposed Greenway for similar reasons; each aims to enhance the public transport and active travel network around the Greater Dublin Area and reduce reliance on personal vehicles. They are not expected to lead to environmental changes that would have cumulative, or in-combination knock on effects with the proposed scheme.

3.6.2. Larger-scale Local Projects

Carrickmines Shanganagh River Flood Relief Scheme (ABP Case Ref. JA06D.321937): This proposed development is for flood defences at key locations along the Carrickmines and Shanganagh rivers including new walls/raised existing walls, culverts, localised screens upgrades and localised works in the river. It is expected to reduce the likelihood of flood damage along this river and is expected to have an overall positive impact on the area, reducing the likelihood of flooding, which may aid the longevity of the proposed landscaping around the river from the Cabinteely Greenway.

Cherrywood Green Routes Network (PC/CSDZ/013/2022): This proposed new Greenway will eventually connect on the south end of the proposed project. The two routes, taken in combination will create a

longer active transport network, extending as far south as the Bride's Glen Luas Stop and the Bride's Glen Road. Potential impacts due to this project alone will be assessed in its own Appropriate Assessment, but it is not believed that it will magnify the potential impacts of the Cabinteely Greenway in a way that would lead to cumulative or in-combination impacts.

3.6.3. Smaller-scale Local Projects

The online planning system for Dún Laoghaire-Rathdown County Council was consulted on 19/10/2024, and relevant projects within the vicinity of the proposed greenway were reviewed. These include:

Doyle's Nursery Development (ABP30585919 & ABP30585919/E (Extension of Duration)): This project involves the construction of 234 residential units across three blocks (ranging from 1–8 stories) with associated facilities, including open space, a gym, a crèche, and a foyer. Although construction has not yet begun, the site is located several meters from the proposed greenway route near Carraig Glen, on the opposite side of the river.

Site at Ards, Cartref, and lands to the rear of Foxley (ABP30367519): Approximately 0.2 km south of the greenway's endpoint, this project includes 72 dwellings comprising 46 apartments across two 3-5 storey buildings, along with 26 terraced, semi-detached, and detached houses.

Cherrywood Heights Apartments (DZ24A/0017): Located around 2 km from the greenway, this development proposes 200 apartments across three blocks ranging from 4–5 stories.

Winterbrook and Barrington Tower Development (ABP31328122): Approximately 2.4 km away, this large-scale project includes the restoration of Barrington Tower and the construction of eight blocks of Build to Rent apartments.

Proposed Development at Cabinteely Park PC/PKS/02/24: The development of a single-story changing pavilion of c. 50 m², the restoration of the existing gate lodge, and a general upgrade of the entrance to include paving, planting, seating, bike stands, drainage and all ancillary works.

DZ20A/0491: Amendment to permitted residential scheme, Beechpark.

DZ24A/0621/WEB: Amendment to a previously permitted residential scheme in Brennanstown.

ABP31213221: Permission for a strategic housing development consisting of 419 no. Build to Rent

residential units comprising: 412 no. apartment units on the Old Bray Road.

D18A/0402: Permission for modifications to approved Planning Permission Reg. Ref. D15A/0395 (scheme of 19 Residential dwellings) in Killart on the Clonkeen Road.

D18A0763: Permission for construction of a 34 no. unit residential development on the western side of the junction of Old Bray Road and Brennanstown Road.

DZ25A/0325/WEB: The development proposed consists of a residential development consisting of 121no. residential apartment units (total c. 11,291sqm GFA) accommodated in 2no. blocks, ranging in height from 3 – 5 storeys. The overall development proposed comprises of the following: 121 no. apartment units in 2 no. blocks.

Although these developments have been assessed individually and are not directly connected to the proposed development, they collectively contribute to:

- **Impact:** Reduction in green space.
Effect: The cumulative loss of semi-natural habitats across these projects reduces foraging, nesting, and sheltering opportunities for wildlife, especially in urbanised areas where green space is already limited.
- **Impact:** Increased Lighting
Effect: The combined increase in artificial lighting, particularly in the Brennanstown/Carraig Glen section of the greenway, represents a potential pressure on local wildlife. Light pollution can disrupt nocturnal species, impact foraging behaviours, and fragment habitats by creating areas avoided by sensitive fauna.

3.6.4. Conclusion

While no significant fragmentation of high-value habitats is anticipated, the cumulative reduction in green space and increased urbanisation of a green area are predicted. Neither of these factors are considered to affect the determinations made for Light-bellied Brent Goose or Oystercatcher above, or any of the other QI species identified in Section 3.

4. Summary

4.1. Appropriate Assessment Screening Criteria

4.1.1. Is the Project necessary to the Management of the Natura 2000 Site(s)?

The proposed project is not necessary to or connected with the management of any Natura 2000 Sites.

4.1.2. Possible Direct, Indirect or Secondary Impacts

A direct impact to a protected Natura 2000 Site is any activity or event that has a negative effect on the site's conservation objectives. This can include:

- Physical damage, such as habitat destruction or fragmentation
- Disturbance to flora and fauna, such as noise or light pollution
- Pollution of water or air quality
- Introduction of invasive species
- Overexploitation of natural resources

Direct impacts can occur within the boundaries of a Natura 2000 Site, or they can occur outside of the boundaries but still have a negative effect on the Site. Direct impacts to protected Natura 2000 Sites are a serious threat to biodiversity and the environment. They can lead to the loss of habitats and species, and they can undermine the effectiveness of the Natura 2000 Network as a whole. It is important to note that even small direct impacts can have a significant negative effect on a Natura 2000 Site.

Direct impacts upon Natura 2000 Sites have been assessed and none are predicted to result from proposed project.

Indirect impacts to a Natura 2000 Site are those that are caused by an activity or event that occurs outside of the site's boundaries but still has a negative effect on the site's conservation objectives. Indirect impacts can be more difficult to identify and assess than direct impacts, but they can be just as significant. Indirect impacts can be cumulative, meaning that the combined effect of several small indirect impacts can be significant.

Indirect impacts upon Natura 2000 Sites, their ex-situ habitats and their mobile QIs have been assessed and none are predicted to result from the proposed development.

4.1.3. Likelihood of Significant Effects on QI Species

Two Natura 2000 Sites were identified for further assessment due to the potential for impacts upon their mobile QI species. Of these, two mobile QI bird species were identified as potentially being at risk, however no significant effects are foreseen on these species for the following reasons:

Light-bellied Brent Goose

- **Habitat Preferences:** Brent Geese favour large, open areas of regularly mowed, fertilised grasslands, such as sports pitches and school grounds. Though two small pitches are present in the park, Cabinteely Park's grassland management and size make it only marginally suitable for foraging.
- **Avoidance of Urban Green Spaces:** Studies show that Brent Geese generally avoid urban green spaces, especially those with high levels of human and dog activity. Cabinteely Park's current recreational disturbance makes it unlikely to be a significant foraging ground for this species.
- **Proximity to Key Sites:** Nearby areas such as Seapoint Rugby Club and Kilbogget Park are noted as important foraging sites, indicating that geese are more likely to utilise these established locations over Cabinteely Park.

Oystercatchers

- **Suitability of Habitat:** While moist and soft soils can attract birds for foraging, there are no records of Oystercatchers feeding within the footprint of the proposed Development, and the high levels of recreational disturbance from walkers and dogs make it an unsuitable feeding site. This species shows preference for large open spaces such as sports pitches.
- **Existing Disturbance:** The park already experiences significant recreational use, which likely prevents regular use by Oystercatchers.

Overall Assessment

Cabinteely Park already experiences high levels of recreational disturbance that limit its use by both species for foraging. The construction of a greenway, which may slightly increase recreational use, is unlikely to result in significant additional impacts on these birds, as the park is not a critical habitat or regularly used feeding ground for QI species.

5. Conclusion

This report presents the information for the relevant authority, Dún Laoghaire-Rathdown County Council, to carry out a screening for AA. A recommendation that a **Stage Two AA is not required** is made, based on the findings of this assessment.

It is for the relevant authority to reach one of the following conclusions:

- I. A stage II AA of the proposed development is required if it *cannot* be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any Natura 2000 Sites.
- II. A stage II AA of the proposed development is not required if it *can* be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any Natura 2000 Sites.

It is the conclusion of this report that, on the basis of objective information and in view of best scientific knowledge, while applying the precautionary principle, the proposed development, either individually or in combination with other plans or projects, and without relying on any mitigation measures, is not likely to have a significant effect on any Natura 2000 Sites, in view of each sites' conservation objectives. There is no reasonable scientific doubt in relation to this conclusion.

6. Citations & Reference Documents

- Adcock, T. (2022). Dalkey Tern Conservation Project: Report September 2022. *Prepared for BirdWatch Ireland and Dún Laoghaire-Rathdown County Council.*
- Collins, J. ed. (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). The Bat Conservation Trust. London. ISBN – 13 978-1-87-2745-96-1
- European Commission (2007) Interpretation manual of European Union habitats – EUR27.
- Fossitt, J.A. (2000) *A Guide to Habitats in Ireland*. The Heritage Council, Kilkenny.
- Gilbert, G, Stanbury, A and Lewis, L. (2021) Birds of Conservation Concern in Ireland 2020-2026. *Irish Birds*, 9: 523—544.
- Harrison, X.A., Blount, J.D., Inger, R., Norris, D.R. and Bearhop, S. (2011), Carry-over effects as drivers of fitness differences in animals. *Journal of Animal Ecology*, 80: 4-18. <https://doi.org/10.1111/j.1365-2656.2010.01740.x>
- Inland Fisheries Ireland (2016). Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters. Available online at <https://www.fisheriesireland.ie/documents/624-guidelines-on>
- Inger, R., Harrison, X.A., Ruxton, G.D., Newton, J., Colhoun, K., Gudmundsson, G.A., McElwaine, G., Pickford, M., Hodgson, D. and Bearhop, S. (2010), Carry-over effects reveal reproductive costs in a long-distance migrant. *Journal of Animal Ecology*, 79: 974-982. <https://doi.org/10.1111/j.1365-2656.2010.01712.x>
- Inger, R., Ruxton, G.D., Newton, J., Colhoun, K., Robinson, J.A., Jackson, A.L. And Bearhop, S. (2006), *Temporal and intrapopulation variation in prey choice of wintering geese determined by stable isotope analysis*. *Journal of Animal Ecology*, 75: 1190-1200. <https://doi.org/10.1111/j.1365-2656.2006.01142.x>
- JNCC (2010). *Handbook for Phase 1 Habitat Survey – a technique for environmental audit*. Joint Nature Conservation Committee, Peterborough (UK).
- JNCC (2004). Common Standards Monitoring Guidance for Birds. Joint Nature Conservation Committee. August 2004 (updated from the February 2004 version). ISSN 1743-8160 (online).
- Kelleher, C. & Marnell, F. (2006) *Bat Mitigation Guidelines for Ireland*. Irish Wildlife Manuals, No. 25. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government,

Dublin, Ireland.

Kelly, J., O'Flynn, C., and Maguire, C. (2013) *Risk analysis and prioritisation for invasive and nonnative species in Ireland and Northern Ireland*. A report prepared for the Northern Ireland Environment Agency and National Parks and Wildlife Service as part of Invasive Species Ireland

Keeley, B. (2023). *A Bat Assessment of the Proposed Greenway, Cabinteely, Dun Laoghaire-Rathdown, County Dublin, and an Evaluation for Potential Impacts on the Bat Fauna*. Unpublished Report.

Lewis, L. J., Coombes, D., Burke, B., O'Halloran, J., Walsh, A., Tierney, T. D. & Cummins, S. (2019) Countryside Bird Survey: Status and trends of common and widespread breeding birds 1998-2016. Irish Wildlife Manuals, No. 115. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

Lysaght, L. and Marnell, F. (Eds) (2016) *Atlas of Mammals in Ireland 2010 – 2015*, National Biodiversity Data Centre, Waterford.

NPWS (2024a) Conservation Objectives: Wicklow Mountains SPA 004040. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2024b) Conservation Objectives: Dalkey Islands SPA 004172. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2024c) Conservation Objectives: Howth Head Coast SPA 004113. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2023) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

NPWS (2015a) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2015b) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013a) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013b) Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NPWS (2013c) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and

Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

NRA (2009) Guidelines for Assessment of Ecological Impacts of National Road Schemes. National Roads Authority (now Transport Infrastructure Ireland) Dublin.

Robinson, J.A., Colhoun, K., Gudmundsson, G.A., Boertmann, D., Merne, O.J., O'Briain, M., Portig, A.A., Mackie, K., and Boyd, H. (2000). *Light-bellied Brent Goose Branta bernicla hrota (East Canadian High Arctic population) in Canada, Ireland, Iceland, France, Greenland, Scotland, Wales, England, the Channel Islands and Spain 1960.*

NTA (2023), Guidance for EIA and AA Screening of Active Travel Projects Funded by the NTA. National Transport Authority, October 2023.

Smith, G. F., O'Donoghue, P., O'Hora, K., & Delaney, E. (2011) *Best Practice Guidance for Habitat Survey and Mapping*. The Heritage Council, Kilkenny.

University of Exeter. (2022). *Understanding patterns of urban habitat use in overwintering light-bellied Brent geese in Dublin, Ireland. Project Report, November 2022.* Supervision: Prof. Stuart Bearhop and Dr. Kendrew Colhoun. Collaboration: Irish Brent Goose Research Project.

[UK Bird Survey Guidelines](https://birdsurveyguidelines.org/introduction/authorship-and-acknowledgements/) (accessed 29th April 2025). Website which provides guidance on bird surveys within the UK, in accordance with International and national legislation and is compliant with CIEEM guidelines. Produced under direction of the Bird Survey & Assessment Steering Group. <https://birdsurveyguidelines.org/introduction/authorship-and-acknowledgements/>

7. Appendix I: Survey Data

7.1. Winter Bird Survey

High-tide surveys were carried out across 2 no. days in January (13th and 14th) across 4 no. locations within the park. Vantage Point locations and recorded data is given in Appendix I.



Figure 3: VP survey locations.

The following results were observed. Conditions were clear and sunny (12-15 C), wind 5 knots SE.

Table 3: Location 1 results.

Species observed	BTO code	Number of individuals	Behaviour code	Habitat	Notes
Black-headed Gull* (<i>Chroicocephalus ridibundus</i>)	BH	1	FL	Amenity Grassland, Treeline, Built Environment	Flying over meadow

Blackbird (<i>Turdus merula</i>)	B.	10	RE, FE, FL	Amenity Grassland, Treeline	Calls from the treeline, feeding on the meadow
Chaffinch (<i>Frangilla coelebs</i>)	CH	3	RE, FL	Amenity Grassland, Built Environment	Resting on tree and flying on the meadow
Herring Gull (<i>Larus argentatus</i>)	HG	4	RE, FL	Amenity Grassland, Built Environment	Flying over meadow
Hooded Crow (<i>Corvus cornix</i>)	HC	6	RE, FE, FL	Amenity Grassland, Treeline	mostly resting on the treeline
House Sparrow (<i>Passer domesticus</i>)	HS	2	CA, FL	Amenity Grassland, Treeline, Built Environment	Flying over meadow
Jackdaw (<i>Coloeus monecula</i>)	JD	6	CA, FL, RE	Treeline	Resting on tree and flying on the meadow
Magpie (<i>Pica pica</i>)	MG	6	CA, FE, FL, RE	Amenity Grassland, Treeline, Built Environment	Feeding on the meadow and flushed away by passing cars
Robin (<i>Erithacus rubecula</i>)	R.	4	CA, FL, RE	Amenity Grassland, Treeline	Calls from the treeline
Siskin (<i>Spinus pinus</i>)	SK	1	FL, RE	Treeline	Flying in and out the Ivy covering the tree
Song Thrush (<i>Turdus philomelus</i>)	ST	1	FE, FL, RE, WA	Amenity Grassland, Treeline	Flying back and forth from the treeline to the meadow
Starling (<i>Sturnus vulgaris</i>)	SG	15	FL, FO	Amenity Grassland, Built Environment	Feeding on the meadow
Woodpigeon (<i>Columba palumbus</i>)	WP	6	DI, FE, FL, RE, WA	Amenity Grassland, Treeline, Built Environment	scared by passeby with dog

Table 4: Location 2 results.

Species observed	BTO code	Number of individuals	Behaviour code	Habitat	Notes
Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	BH	22	AG, FE, FL, RE, WA	Amenity Grassland	Flocking and feeding in groups on the meadow on the other side of the stream. Chasing away two Song Thrushes.
Blackbird (<i>Turdus merula</i>)	B.	3	CA, FL, RE	Amenity Grassland, Treeline	Calls from the treeline
Blue Tit (<i>Cyanistes caeruleus</i>)	BT	3	CA	Treeline	Calls from the treeline
Herring Gull (<i>Larus argentatus</i>)	HG	4	CA, FL	Amenity Grassland	Flying over meadow
Hooded Crow (<i>Corvus cornix</i>)	HC	8	CA, AG, FL, FO	Amenity Grassland	Mobbing against Sparrowhawk
Jackdaw (<i>Coloeus monecula</i>)	JD	20	CA, FE, FL, FO, WA	Amenity Grassland, Treeline	Flying over meadow and feeding.
Little Egret (<i>Egretta garzetta</i>)	ET	1	PR, RE	Treeline	Resting on a tree while grooming feathers.
Magpie (<i>Pica pica</i>)	MG	6	CA, FE, FL, RE, WA	Amenity Grassland, Treeline	Different couples involved in different activities.
Robin (<i>Erithacus rubecula</i>)	R.	1	CA	Treeline	Calls from the treeline
Song Thrush (<i>Turdus philomelus</i>)	ST	6	DI, FE, WA	Amenity Grassland	Feeding on the meadow until scared by a Sparrowhawk. Came back after 20 minutes. Kept on feeding until chased away by two Black-headed Gulls.
Sparrowhawk (<i>Accipiter nisus</i>)	SH	1	DI, FL	Amenity Grassland	Mobbed by Hooded Crow
Starling (<i>Sturnus vulgaris</i>)	SG	1	FE, WA	Amenity Grassland	Feeding on the maedow among the Jackdaws
Treecreeper (<i>Certhia familiaris</i>)	TC	1	CA	Treeline	Calls from the treeline

Woodpigeon (<i>Columba palumbus</i>)	WP	6	FE, FL, RE, WA	Amenity Grassland, Treeline	Resting on a tree and feeding on the meadow.
---	----	---	-------------------	-----------------------------------	---

Table 5: Location 3 results.

Species observed	BTO code	Number of individuals	Behaviour code	Habitat	Notes
Black-headed Gull* (<i>Chroicocephalus ridibundus</i>)	BH	5	FO	Amenity grassland	Flying from the artificial pond nearby
Blackbird (<i>Turdus merula</i>)	B.	5	CA, FE, FL, WA	Amenity grassland, Treeline	Calls between individuals and feeding on the meadow
Coal Tit (<i>Periparus ater</i>)	CT	1	CA	Treeline	Calls from the treeline
Hooded Crow (<i>Corvus cornix</i>)	HC	4	FL	Amenity grassland	Flying over the meadow.
Jackdaw (<i>Coloeus monedula</i>)	JD	3	FL	Amenity grassland	Flying over the meadow. Feeding until flushed away by a jogger.
Magpie (<i>Pica pica</i>)	MG	8	CA, FE, FL, WA	Amenity grassland, Treeline	Flying over the meadow.
Mallard Duck (<i>Anas platyrhynchos</i>)	MA	3	FE, WA	Amenity grassland	Walking from the pond and entering the stream.
Robin (<i>Erithacus rubecula</i>)	R.	3	CA	Treeline	Calls between individuals
Song Thrush (<i>Turdus philomelos</i>)	ST	2	FE, WA	Amenity grassland	Moving in pairs and flying back and forth from the wooded area
Woodpigeon (<i>Columba palumbus</i>)	WP	7	CA, FE, FL, WA	Amenity grassland, Treeline	Resting on trees and feeding on the meadow.

Table 6: Location 4 results.

Species observed	BTO code	Number of individuals	Behaviour code	Habitat	Notes
Blackbird (<i>Turdus merula</i>)	B.	8	CA, FE, RE	Amenity grassland, Hedgerow	Feeding on the meadow and coming back to the hedgerow.
Dunnok (<i>Prunella modularis</i>)	D.	2	CA, RE	Hedgerow	Calls coming from the hedgerow on the opposite side to the construction site.
Herring Gull (<i>Larus argentatus</i>)	HG	3	FL	Amenity grassland	Flying over meadow
Hooded Crow (<i>Corvus cornix</i>)	HC	2	CA, FE, RE	Amenity grassland	Resting on a tree
Jackdaw (<i>Coloeus monecula</i>)	JD	5	FO	Amenity grassland	Flying over meadow
Magpie (<i>Pica pica</i>)	MG	10	CA, FL	Amenity grassland	Flying over meadow
Robin (<i>Erithacus rubecula</i>)	R.	4	CA, RE	Hedgerow	Calls coming from the hedgerow.
Woodpigeon (<i>Columba palumbus</i>)	WP	5	FE, FL, RE	Amenity grassland, Hedgerow	Flying over meadow and resting on a tree and the hedgerow. Feeding on the meadow.