Appropriate Assessment Screening Report

for proposed

Corduff Park Upgrade Corduff, Dublin 15

in accordance with the requirements of Article 6(3) of the EU Habitats Directive

for: Fingal County Council

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1. Introduction

1.1. Background

CAAS Ltd. has been appointed by Fingal County Council (FCC) to carry out an Appropriate Assessment (AA) screening of the proposed Corduff Park Upgrade, Corduff, Dublin 15 (the proposed development). This Appropriate Assessment (AA) Screening Report (also known as *Stage One* AA) has been prepared to assess whether or not a Natura Impact Statement (NIS) (also known as *Stage Two* AA) is required for the Proposed development. AA is a procedure carried out in accordance with the requirements of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (hereafter referred to as the "Habitats Directive").

1.2. Report Structure

This report sets out the legislative context for the assessment process with reference to relevant guidelines and highlight the experience and qualifications of the author (See Appendix V for author qualifications). It then details the proposed development and the works associated with this which are then interrogated to identify any possible effects which may be ecologically relevant for European sites. Following this, the metrics for the assessment of 'significance' of these effects are explained and applied to each of the European sites with ecological connectivity to the Proposed development area. This assessment is undertaken in view of the conservation objectives and known sensitivities of the qualifying interests and special conservation interests for each European site. Other plans and projects are then considered to identify any likely in-combination effects which may result in the potential significant effects to European sites.

1.3. Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable among them. These two designations are collectively known and referred to as European sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended).

Article 6(3) of the Habitats Directive States:

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

obtained the opinion of the general public'.

The AA process relates to the protection of species listed in Annex I and Annex II of the Habitats Directive which form the Natura 2000 network (Article 3(1)). Species breeding and resting places of species listed in Annex IV of the Habitats Directive are nationally protected in Ireland as per Articles 15 and 16 of the Habitats Directive. The actual species listed in Annex IV do not form part of the Natura 2000 network as they are not mentioned in Article 3(1) of the Directive which defines the Natura 2000 network.

Article 3(1) of the Habitats Directive States:

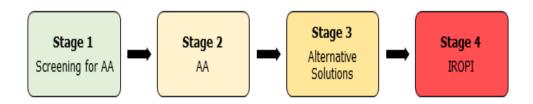
'A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range'.

AA is an assessment of the likely significant effects arising from a plan or project, either individually or in combination with other plans or projects, to assess if the plan or project will have potential for significant affect any European site concerned including implications in view of the European site's conservation objectives. These sites consist of SACs and SPAs and provide for the protection and long-term survival of Europe's most valuable and threatened species and habitats. Where a formal consent process applies, the AA process is concluded by the relevant competent authority making a determination in accordance with article 6(3) of the Habitats Directive.

1.4. Overview of the Habitats Directive and Appropriate Assessment Process

The Habitats Directive itself promotes a hierarchy of avoidance, mitigation and compensatory measures. This approach aims to avoid any effects on European sites by identifying possible effects early in the plan or project making process and avoiding such effects. Second, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential significant effects on European sites remain, and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan or project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

There are four main stages in the AA process:



Stage One: Screening

The process that identifies the likely impacts upon a European site of a project or plan, either alone or in combination with other projects or plans and considers whether these

impacts are likely to be significant.

Stage Two: Appropriate Assessment

The consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse effects mitigation measures are required to avoid or minimise potential effects. The details of these mitigation measures are then assessed in the context of the ecological integrity of the plan/project characteristics to ensure no significant adverse effects on European sites. If this assessment process shows there are no residual significant effects, then the process may end at this stage, stage two, of the AA process which are formalised in Natura Impact Statements (NIS) reports which support the overall AA process. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions

The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

1.5. Approach

This AA screening is based on best scientific knowledge and has utilised ecological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives. The EPA Envision map viewer (www.epa.ie) and available reports were also reviewed, as was the NPWS (2019) publication "The Status of Protected EU Habitats and Species in Ireland".

The ecological desktop study that has been completed for the AA screening of the proposed development, comprised the following elements:

- Identification of European sites within 15km¹ of the subject lands;
- Identification of European sites pathways for effects from the site have been identified (if relevant²) greater than 15km from the subject lands;
- Review of the NPWS site synopses and conservation objectives for European sites within 15km and for which potential pathways from the proposed development area have been identified; and
- Examination of available information on protected species.

¹ While the actual zone of influence is likely to be much smaller, the default 15km zone extent has been applied on a precautionary basis further detail on this is identified in section 3.2

² This is particularly relevant for all sites with hydrological connectivity or other significant ecological pathways

Source-Pathway Receptor Model

Ecological impact assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model, where, in order for an effect to be established, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is not of any relevance or significance.

- Source(s) e.g., pollutant run-off from proposed development;
- Pathway(s) e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) qualifying aquatic habitats and species of European sites.

In the context of this report, a receptor is an ecological feature that is known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the Proposed development that is known to interact with ecological processes. A pathway is any connection or link between the source and the receptor³.

This report provides information on whether direct, indirect and cumulative potential significant effects could arise from the proposed development.

Guidance

The AA screening has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities,
 Department of the Environment, Heritage and Local Government, 2009;
- Commission Notice: Managing Natura 2000 sites The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC", European Commission 2018;
- Assessment of plans and projects in relation to Natura 2000 sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission, 2021;
- European Commission, Directorate-General for Environment, Guidance document on assessment of plans and projects in relation to Natura 2000 sites: a summary, Publications Office of the European Union, 2022;
- Managing Natura 2000 sites: The Provisions of Article 6 of the Habitats Directive 92/43/EEC", European Commission, 2000; and
- Practice Note PN01: Appropriate Assessment Screening for Development Management,
 Office of the Planning Regulator, 2021.

³ qualifying interest or special conservation interests of the European site in question and the known sensitivities of these key ecological receptors

2. Description of Proposed Development

2.1. Receiving Environment Overview

The proposed development is located in Corduff Park, Corduff, Blanchardstown, north-west of Dublin City. The proposed site is approximately 7.1 ha and is composed mostly of amenity grassland, with a soft surface playing pitch, parkland trees, and hard surface pathways, and a small children's playground – for local amenity use. The proposed development area is immediately bordered on all sides by suburban residential developments, with the R121 located to the north of the proposed development (Figure 2.1).

In a wider context, the area is composed of highly developed suburban housing, and large industrial estates, with the N3 motorway located to the south-west, and the M50 to the south-east. The River Tolka, which flows into Dublin Bay, is located approximately 380m south-west of the proposed development. There are two additional watercourses in the wider area of the proposed development; one to the north-west of the proposed site, Ballycoolen Stream; and one to the east of the proposed development, Abbotstown Stream – both of which flow into the River Tolka (Figure 2.2). However, there is no direct surface hydrological connection with the aforementioned watercourses. There is indirect connectivity via infiltration of rainwater through the soft surface grassland of the park itself and urban, underground surface water drainage that is ubiquitous in urban/suburban landscapes.

2.2. The Proposed Development

- The proposed public park & sports development works include the replacement & extension of the existing all-weather soccer pitch to approx. 100 m x 64 m; amended outdoor pitch lighting layout with; removal and reuse of the existing solid bar railing at the perimeter of the existing pitch; the installation of 3.5 m high weld-mesh fencing to the perimeter of the new all-weather pitch; the installation of a 12 m long storage container adjacent to the extended all-weather pitch; drainage improvement works to the existing grass soccer pitch.
- New & existing park footpaths consisting of 3 m wide asphalt shared pathways around the perimeter and pedestrian only pathways, 2.5 m wide dissecting the park to enhance accessibility and utility. (Approximately 1,000 m linear metres).
- Provision of new pedestrian access at south of park boundary from Edgewood Lawns.
- Installation of K-Barriers at entrances to facilitate universal access.
- The existing palisade fencing boundary at Blackcourt Road to be replaced with solid bar railing retrieved from the existing perimeter of the existing all-weather pitch.
- Bicycle parking is to be located at primary entrances and in proximity to park facilities; 83 bicycle parking spaces in total to include covered spaces.
- New 3 outdoor exercise equipment to augment existing equipment.
- A Hill fort themed playground incorporating natural play elements measuring approximately 500 m² with permeable surface and features in keeping with Space for Play – A Play Policy for Fingal.
- The existing grass football field.
- Landscape works to existing community garden including raised beds, planting, seating & footpaths.
- Proposed car park of approximately 34 parking spaces including 3 disabled parking bays & 4
 EV ready charging bays with additional provision for motorbike parking. Ducting for future

- provision of EV charging proposed throughout. Proposed surface treatments consist of asphalt road and permeable surfaces to parking bays with landscaped perimeter and infills to include SuDS features. Lockable bicycle parking is proposed to provide for cargo bikes etc.
- Landscaping works incl. localised tree works, tree planting, soil regrading including
 mounding less than 1.5 m high & rainwater attenuation swales where appropriate grassland
 meadows and boundary treatments. Earthen Berms incorporating the excavated material
 from the construction of the all-weather pitch and car park located within the development
 site are proposed to be graded to complement the landscape setting of the facilities and to
 enhance the playground.
- All other ancillary site works including drinking fountain installation, electricity and drainage connections.

The total proposed site area is approximately 7.1 ha.



Figure 2.1. Site location map

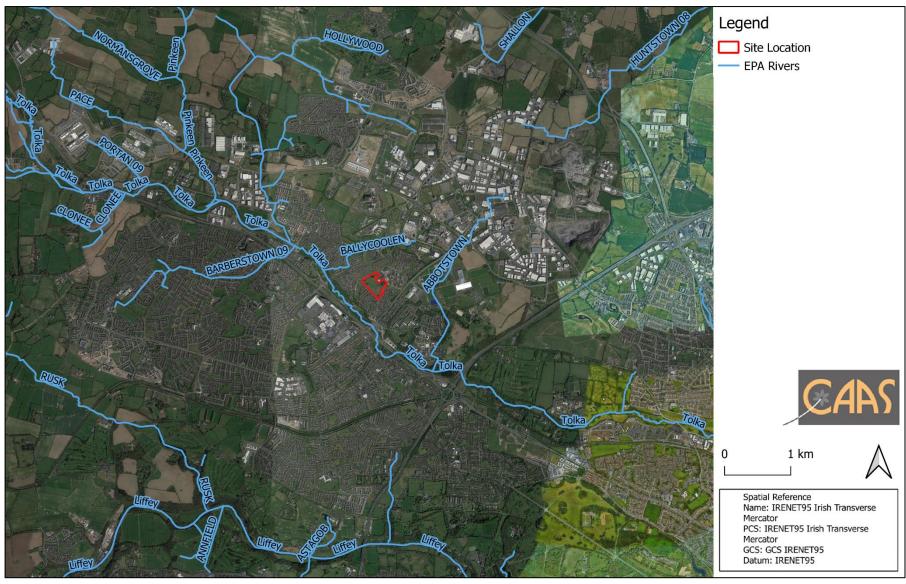


Figure 2.2. Location of EPA rivers relative to the proposed development



Figure 2.3. Site layout plan



Figure 2.4. Plan of proposed upgrade works

3. Screening for Appropriate Assessment

3.1. Introduction

This stage of the process identifies any likely significant effects on European sites from the project, either alone or in combination with other projects or plans. A series of questions are asked in order to determine:

- Whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European site.
- Whether the project will have a potentially significant effect on a European site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

An important element of the AA process is the identification of the "Conservation Objectives" (Appendix IV), "Qualifying Interests" (QIs) (Appendix II) and/ or "Special Conservation Interests" (SCIs) (Appendix III) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document 'Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC', paragraph 4.6(3):

"The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives."

Favourable conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, are stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

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

3.2. Identification of relevant European sites

This section of the screening process describes the European sites which exist within the Zone of Influence (ZOI) of the site. An assessment of the sources of effects (see Section 3.3 below) identified that effects from the proposed development are likely to be localised – in the absence of

hydrological pathways. The Environment, Heritage and Local Government (2009) Guidance on AA recommends a 15km zone to be considered.

There are two key considerations when identifying ecological pathways - the first is the distance from which potential sources for effects can radiate known as the zone of influence (ZoI) and the second is the potential for sensitive receptors (QIs/SCIs) to interact with the ZoI which is a further pathway consideration zone (PCZ). It is understood that sites designated for vagile species are known to utilise isolated resources across the landscape could intersect with the localised zone of influence; however, beyond 15km potential effects to such species at this scale are not identified to be significant due to the broad home range available to these species and the availability of alternate resources. Therefore, a radius of 2km has been adopted as the ZoI and a 15km radius was adopted as the PCZ for this AA - however, further considerations were given to hydrological pathways from the proposed development which extended beyond the 15km limit.

European sites identified to have ecological connectivity pathways for potential effects from the proposed development are listed in Appendix 1 and illustrated in Figure 3.1 below. Details on the specific QIs and SCIs of each European site are also identified in the Appendix, as well as site-specific threats and vulnerabilities of each of the sites.

In order to determine the potential effects of the proposal, information on the qualifying features, known vulnerabilities and threats pertaining to any potentially affected European sites has been reviewed. Background information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

- Ireland's Article 17 Report to the European Commission "Status of EU Protected Habitats and Species in Ireland" (NPWS, 2019);
- Ireland's Article 12 Report to the European Commission "Bird species' status and trends reporting format for the period 2008-2012-" (NPWS, 2012)
- Site Synopses⁴; and
- NATURA 2000 Standard Data Forms⁴.

The assessment considers the SSCOs of each of the sites within the ZOI. Since the conservation objectives for the European sites focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process has concentrated on assessing the potential effects of the Proposed development against the QIs/SCIs of each site. The conservation objectives for each site have been taken into account throughout the assessment process.

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⁴ NPWS (2019); NPWS Database of protected site data and associated documents for each European site; available at https://www.npws.ie/protected-sites: last accessed 16th March 2023

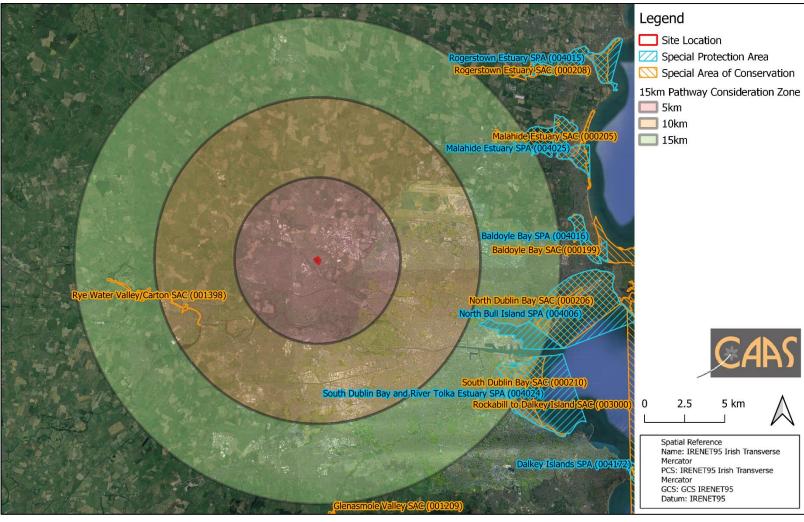


Figure 3.1. European sites within 15km of the proposed development boundary⁵

⁵ Source: NPWS (datasets downloaded 16th March 2023)

3.3. Assessment criteria

3.3.1. Is the development necessary to the management of European sites?

Under the Habitats Directive, projects that are directly connected with or necessary to the management of a European site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the project, even if this might result in positive or beneficial effects for a site(s).

The primary purpose of the proposed development is not the nature conservation management of the sites, but to provide upgrades to the already existing Corduff Park, Corduff, Dublin 15 and all associated site works. Therefore, the proposed development would not be considered by the Habitats Directive to be directly connected with or necessary to the management of European designated sites.

3.3.2. Elements of the proposed development with potential to give rise to effects

This screening assessment process identifies whether the changes brought about by the proposal are likely to cause any direct, indirect or secondary effects (either alone or in combination with other plans or projects) on the European sites. During this assessment a number of factors have been taken into account including the sites' conservation objectives and known threats. The overall aim of the assessment is to predict the consequences that can be reasonably foreseen by implementation of the proposed development.

For the purposes of this assessment, the proposed development is identified to have potential construction and operational phase effects at a local scale.

Construction phase

The construction phase is small in scale and will be temporary (i.e., under 1 year duration). There is potential for disturbance effects through construction related noise, increased dust, surface water run-off, and earthworks removals.

Operational phase

The proposed development aims to provide for upgrades to the existing Corduff Park. There will be a permanent loss of approximately 7,500m² of amenity grassland in the north of the site as part of the proposed development, which would reduce potential foraging area for SCI species. However, given the sites' existing nature as a highly disturbed amenity parkland, the loss of this potential habitat as a result of the proposed development is not likely to introduce any potential for significant effects in terms of loss of foraging habitat for SCI species. The park is situated in an urban area, surrounded by residential developments, and is already frequented by visitors. It is not expected that the proposed development will result in any significant increase in visitors or noise levels. The change from the current amenity grassland in the north of the site to permeable surfaces as part of best practice project design, will not present any likely potential for significant effects via surface water run-off, as these permeable surfaces will continue to percolate surface and storm water. Notwithstanding permeable surfaces, the conversion of the same area to hard surface is not sufficient in size to change surface water run-off to the degree that it would introduce any potential for likely significant

effect due to the distances and dilution factor involved, and the small-scale and temporary duration of the construction phase. In addition, no current underground drainage system infrastructure alterations will occur as a result of the proposed development. Therefore, the indirect pathway of surface water run-off drainage will not present any likelihood potential for significant effects via hydrological connectivity as a result of the proposed development.

The construction and operational phase elements of the proposed development with potential to introduce sources for effects to ecological processes are identified below:

Construction phase

- Disturbance effects through noise;
- Dust;
- Increase run-off; and
- Earthworks (removal of soil etc.,).

Operational phase

• Loss of habitat (amenity grassland).

The construction phase will be localised, small-scale and temporary. The operational phase effects will be localised, small-scale and permanent. The construction and operational phase potential effects identified are considered in the context of European sites identified in below, their sensitivities and conservation objectives.

3.3.3. Identification of potential effects and screening of sites

This section documents the final stage of the screening process. It has used the information collected on the sensitivity of each European site and describes any potential effects on European sites resulting from the proposed development. This assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for effects, a number of factors have been taken into account. First, the sensitivity and reported threats to European sites. Second, the individual elements of the proposed development and the potential effects they may cause on the sites were considered. The elements of the proposed development with potential to affect European sites are presented in Table 3.1.

Sites are screened out based on one or a combination of the following criteria:

- where it can be shown that there are no significant pathways such as hydrological links between activities of the proposed development and a site;
- where a site is located at such a distance from proposed development area that effects are not foreseen; and
- where known threats or vulnerabilities of a site cannot be linked to potential impacts that may arise from the proposed development.

3.4. Characterising potential significant effects

This section of the report explains the metrics used when assessing if the potential effects (previously identified) will have significant implications for European sites. The following parameters are described when characterising impacts (following guidance from the Chartered Institute of Ecology and Environmental Management, the Environmental Protection Agency and the National Roads Authority):

- **Direct and Indirect Impacts** An impact can be caused either as a direct or as an indirect consequence of a Plan/Project.
- Magnitude Magnitude measures the size of an impact, which is described as high, medium, low, very low or negligible.
- **Extent** The area over that the impact occurs this should be predicted in a quantified manner
- **Duration** The time that the effect is expected to last prior to recovery or replacement of the resource or feature.
 - Temporary: Up to 1 Year;
 - Short Term: The effects would take 1-7 years to be mitigated;
 - Medium Term: The effects would take 7-15 years to be mitigated;
 - Long Term: The effects would take 15-60 years to be mitigated; and
 - Permanent: The effects would take 60OR years to be mitigated.
- **Likelihood** The probability of the effect occurring taking into account all available information.
 - Certain/Near Certain: >95% chance of occurring as predicted;
 - Probable: 50-95% chance as occurring as predicted;
 - Unlikely: 5-50% chance as occurring as predicted; and
 - Extremely Unlikely: <5% chance as occurring as predicted.

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines for ecological impact assessment (2016) define: an ecologically significant impact as an impact (negative or positive) on the integrity of a defined site or ecosystem and/or the conservation status of habitats or species within a given geographic area; and the integrity of a site as the coherence of its ecological structure and function, across its whole area, which enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which it was classified.

The Habitats Directive requires the focus of the assessment at this stage to be on the integrity of the site as indicated by its Conservation Objectives. It is an aim of NPWS to draw up conservation management plans for all areas designated for nature conservation. These plans will, among other things, set clear objectives for the conservation of the features of interest within a site.

SSCOs have been prepared for a number of European sites. These detailed SSCOs aim to define favourable conservation condition for the qualifying habitats and species at that site by setting targets for appropriate attributes which define the character habitat. The maintenance of the favourable condition for these habitats and species at the site level will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a **species** can be described as being achieved when: 'population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.'

Favourable conservation status of a **habitat** can be described as being achieved when: 'its natural range, and area it covers within that range, is stable or increasing, and the ecological

factors that are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable'.

A Generic Conservation Objective for a SAC is provided below:

• To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

A Generic Conservation Objective for a SPA is provided below:

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

3.4.1. Types of potential Effects

EC guidance⁶ outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take
- Resource requirements (drinking water abstraction etc.)
- Emissions (disposal to land, water or air)
- Excavation requirements (removal of soil and vegetation)
- Transportation requirements
- Duration of construction, operation, decommissioning

The 2001 European Commission AA guidance outlines the following potential changes that may occur at a designated site, which may result in effects on the Conservation Objectives of that site:

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

The elements detailed above were considered with specific reference to each of the European sites identified in Table 3.1 but are also considered in a broader sense below.

Loss/reduction of habitat area

There are no European sites present within the proposed development boundary. The closest European site to the proposed development site is the Rye Water Valley/Carton SAC, at 7.94km. There are no sources for potential for significant effects via surface water drainage / hydrological connectivity as a result of the proposed development due to the permeable surfaces that are to be introduced as a result of the proposed development will continue to percolate surface and storm water. No Annex I habitats or supporting habitat for Annex II species were identified within the proposed development boundary⁷. Therefore, there will be no effects posed regarding loss of

⁶ 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, European Commission Environment DG, 2001

⁷ Consulting current data sets for the proposed development location supplied by the NPWS (https://www.npws.ie/maps-and-data) and the NBDC (https://maps.biodiversityireland.ie/)

reduction of habitat area of any European sites as a result of the proposed development.

Habitat or species fragmentation

None of the species and/or habitats identified in Table 3.1 occur within the proposed development site⁷. Although there will be a permanent loss of approximately 7,500m² of amenity grassland within Corduff park as a result of the proposed development, this is considered to be a relatively minor loss, due to the existing nature of the proposed site as a highly disturbed amenity parkland, and considering that the majority of the site will remain unchanged. In addition, the receiving environment of the proposed development site has an overall low local value for foraging SCI species due to high disturbance levels of the park, due to its use as a heavily used amenity park in the centre of a highly suburban area.

Disturbance to key species

As mentioned above; none of the species and/or habitats identified in Table 3.1 occur within the proposed development site⁷.

There will be an increase in noise and dust levels during the construction phase, but these will be negligible due to the small-scale and temporary duration of the construction phase, and the distances involved to the nearest European site (at 7.94km). The operational phase of the project will be very similar to the current noise and disturbance levels of Corduff park. The site is 10.68km from the nearest SPA which is a sufficient distance to ensure disturbance effects through noise in the construction phase are unlikely to provide a source for potential significant effects to SCI species. There will be an increase in operational phase lighting, however, due to the low ecological value of the proposed development and the highly developed nature of the surrounding area, any effects from an increase in lighting in the operational phase will be negligible to SCI species. Similarly, as the park is situated in an urban area, surrounded by residential developments, the park is already highly frequented by visitors, and it is not expected that the proposed development will result in any significant increase in visitors or noise levels. Even though there are no sources for likely significant effects from the construction phase, a CEMP also accompanies this application and has outlined the best practice measures and appropriate management for all aspects of the construction phase.

There are no sources for indirect disturbances to the SCI species from surrounding SPAs in terms of ex-situ foraging, as the areas of amenity grassland to be lost is relatively minor (approximately 7,500m²), considering alternative resources available and the location of the site; i.e., within a highly used local amenity park with accompanying high disturbance levels. Therefore, pathways for direct disturbance effects to European sites due to noise, lighting or vibrations as a result of the proposed development are not present.

Reduction in species density

As mentioned above, although there will be a permanent loss of (approximately 7,500m²), of potential foraging habitat, within Corduff park as a result of the proposed development. However, this is considered to be a relatively minor loss, considering alternative foraging resources available and the high disturbance levels due to frequent intensive use of the park itself by residents of the surrounding suburban housing developments. In addition, landscaping works are planned which include additional tree planting and wildflower meadows, which in turn, will increase the ecological value of the proposed development site. While the River Tolka, and an additional two streams which

feed into the Tolka, are nearby (between 350 and 750m in distance), all link to European sites in Dublin Bay, approximately 18km downstream from the proposed development; there is no direct surface hydrological connection with the proposed development and these streams or the River Tolka. There is indirect connectivity via urban surface water drainage, however there will be no change to current underground surface water drainage infrastructure as a result of the proposed development. The approximately 7,500m² of amenity grassland to be removed as a result of the proposed development will be replaced by permeable surfaces, any change introduced to surface water run-off via these permeable surfaces will be negligible. The construction phase effects will also be small in scale and temporary.

The vast majority of the proposed site will remain as permeable surfaces or amenity grassland, which will continue to percolate surface and storm water. The loss of approximately 7,500m² of amenity grassland is unlikely to introduce potential significant effects in this regard due to the existing nature of the proposed site as a highly frequented local amenity parkland and suburban nature of the surrounding area. Therefore, there will be no reduction in species density as a result of the proposed development.

Changes of indicators of conservation value

Water quality is an important indicator for Conservation Objectives of many European sites. Although the River Tolka is nearby to the site, as mentioned above, there is no direct hydrological connection with the proposed development and the River Tolka. There is indirect connectivity via urban surface water drainage, however, any change introduced to surface water run-off caused by replacing the lost amenity grassland (approximately 7,500m²) with permeable surfaces will be negligible and is not substantial enough to cause any significant increase of surface water run-off. In addition, the CEMP which accompanies this application outlines best practice measures and appropriate management for the construction phase. Therefore, there are no sources for effects with pathways that will affect any conservation indicators related to European sites.

Climate change

The proposed development will result in a slight increase in greenhouse gas emissions during the construction phase, which will be localised and temporary. There will be no expected increase in emissions form the operational phase of the proposed development due to the nature of the proposed development, within an already highly frequented amenity park in a suburban area. Given the small scale of the proposed development, timescales involved, and the distance to the nearest European sites, the emissions from the construction phase are determined to be of such a minor scale that they will not affect changes projected to arise from climate change to the degree that it would affect the QIs or SCIs of the European sites considered.

Table 3.1 Screening assessment of the potential effects arising from the proposed development

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
001398	Rye Water Valley/Carton SAC	7.94	Petrifying springs with tufa formation (Cratoneurion) [7220], Desmoulin's whorl snail (Vertigo moulinsiana) [1016], Narrowmouthed whorl snail (Vertigo angustior) [1014]	Fertilisation [A08], Urbanised areas, human habitation [E01], Hunting [F03.01], Invasive nonnative species [I01], No threats or pressures [X], Roads, motorways [D01.02], Bridge, viaduct [D01.05], Nautical sports [G01.01], Motorised vehicles [G01.03], Reclamation of land from sea, estuary or marsh [J02.01.02], Golf course [G02.01], Walking, horse-riding and non-motorised vehicles [G01.02]	Considering the Qualifying Interests and known sensitivities of this European site in the context of the potential effects identified in S3.3.2, this SAC is sensitive to hydrological interactions, land use management, and groundwater interactions. This site is 7.94 km from the proposed development. There are no sources for effect for direct land use management or habitat disturbance effects to the SAC as this site is outside of the proposed development boundary. There are no direct surface hydrological pathways between the proposed development and the SAC. There is a potential source for hydrological interaction via indirect connection of underground urban surface water drainage, however, there will be no significant change to surface water drainage infrastructure as a result of the proposed development as the change from 7,500m² of amenity grassland to permeable surfaces is not foreseen to significantly increase surface water run-off. The construction phase is both small in scale and of a temporary duration and due to the distances involved and dilution factor through indirect hydrological pathways, it is foreseen that there are no potential significant effects via indirect hydrological pathways. Therefore, there is no potential for likely significant effects in this regard. Regarding groundwater interactions; the proposed	No	No

⁸ All distances, including hydrological connectivity, are given as direct A-B distances (i.e., as the crow flies)

⁹ Term used here to encompass both Qualifying Interests of SACs and Special Conservation Interests of SPAs

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
					development will not result in a significant change in surface water run-off, due to the amenity grassland being lost will be replaced with permeable surfaces, and will not significantly change the volume of surface water run-off. Therefore, there is no likelihood for a pathway for effects to groundwater sensitive habitats as a result of the proposed development. Best practice measures will be in place for the construction phase (as outlined in the CEMP accompanying the application) for the proposed development.		
					Considering the QIs of this SAC, and given the nature of the proposed development and the distances involved; there are no potential sources for likely significant effects, and no further assessment is required.		
004024	South Dublin Bay and River Tolka Estuary SPA	10.68	Knot (Calidris canutus) [A143], Common tern (Sterna hirundo) [A193], Dunlin (Calidris alpina) [A149], Grey Plover (Pluvialis squatarola) [A141], Redshank (Tringa totanus) [A162], Ringed Plover (Charadrius hiaticula) [A137], Light-bellied Brent Goose (Branta bernicla hrota) [A674], Oystercatcher (Haematopus ostralegus) [A130], Wetland and Waterbirds [A999], Arctic tern (Sterna paradisaea) [A194], Roseate Tern (Sterna dougallii) [A192], Sanderling (Calidris alba) [A144], Bar-tailed Godwit (Limosa lapponica) [A157], Black-headed Gull (Chroicocephalus	Grazing [A04], Diffuse pollution to surface waters due to other sources not listed [H01.09], Invasive non-native species [I01], Bait digging or collection [F02.03.01], Urbanised areas, human habitation [E01], Industrial or commercial areas [E02], Leisure fishing [F02.03], Other point source pollution to surface water [H01.03], Golf course [G02.01], Walking, horse-riding and nonmotorised vehicles [G01.02], Antagonism with domestic animals [K03.06], Intensive maintenance of public parcs or cleaning of beaches [G05.05],	Considering the Special Conservation Interests and known sensitivities of this European site in the context of the potential effects identified in S3.3.2, this SPA is sensitive to hydrological interactions, direct land use management and disturbance effects. There are no direct surface hydrological pathways between the proposed development and the SPA. There is a potential source for hydrological interaction via indirect connection of underground urban surface water drainage, however, there will be no significant change to surface water drainage infrastructure as a result of the proposed development as the change from approximately 7,500 m² of amenity grassland to permeable surfaces is not foreseen to significantly increase surface water run-off. The construction phase is both small in scale and of a temporary duration and due to the distances involved and dilution factor through indirect	No	No

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
			ridibundus) [A179]	Discharges [E03], Burning down [J01.01], Nautical sports [G01.01]	hydrological pathways, it is foreseen that there are no potential significant effects via indirect hydrological pathways. Therefore, there is no potential for likely significant effects in this regard.		
					SCI species are sensitive to noise disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such effects ^{10,11} . These distances can vary due to factors such as species and/or time of year ^{12,13} . Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard.		
					These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed development. However, given the current nature of the proposed development site as a highly disturbed amenity park, the scale of the proposed development and the availability of alternate resources, ensure the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.		
					Considering the SCIs of this SPA, and given the nature of the proposed development and the distances involved; there are no potential sources for likely significant effects, and no further assessment is required.		
000210	South Dublin Bay SAC	12.86	Mudflats and sandflats not covered by seawater at low tide	Marine water pollution [H03], Accumulation of organic	Considering the Qualifying Interests and known sensitivities of this European site in the context of the	No	No

¹⁰ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

¹¹ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

¹² Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

¹² Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
			[1140], Salicornia and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210], Embryonic shifting dunes [2110]	material [K02.02], Roads, motorways [D01.02], Walking, horse-riding and nonmotorised vehicles [G01.02], Biocenotic evolution, succession [K02], Paths, tracks, cycling tracks [D01.01], Urbanised areas, human habitation [E01], Changes in abiotic conditions [M01], Discharges [E03], Reclamation of land from sea, estuary or marsh [J02.01.02], Nonmotorized nautical sports [G01.01.02], Industrial or commercial areas [E02], Bait digging or collection [F02.03.01], Nautical sports [G01.01]	potential effects identified in S3.3.2, this SAC is sensitive to hydrological interactions and direct land use management. This site is 12.86km from the proposed development. There are no sources for effect for direct land use management or habitat disturbance effects to the SAC as this site is outside of the proposed development boundary. There are no direct surface hydrological pathways between the proposed development and the SAC. There is a potential source for hydrological interaction via indirect connection of underground urban surface water drainage, however, there will be no significant change to surface water drainage infrastructure as a result of the proposed development as the change from approximately 7,500 m² of amenity grassland to permeable surfaces is not foreseen to significantly increase surface water run-off. The construction phase is both small in scale and of a temporary duration and due to the distances involved and dilution factor through indirect hydrological pathways, it is foreseen that there are no potential significant effects via indirect hydrological pathways. Therefore, there is no potential for likely significant effects in this regard. Considering the QIs of this SAC, and given the nature of the proposed development and the distances involved; there are no potential sources for likely significant effects, and no further assessment is required.		
000206	North Dublin Bay SAC	13.55	Mudflats and sandflats not covered by seawater at low tide [1140], Petalwort (Petalophyllum	Grazing [A04], Roads, motorways [D01.02], Continuous urbanisation	Considering the Qualifying Interests and known sensitivities of this European site in the context of the potential effects identified in S3.3.2, this SAC is	No	No

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
			ralfsii) [1395], Humid dune slacks [2190], Mediterranean salt meadows (Juncetalia maritimi) [1410], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Embryonic shifting dunes [2110], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Salicornia and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	[E01.01], Fertilisation [A08], Removal of hedges and copses or scrub [A10.01], Dispersed habitation [E01.03], Sylviculture, forestry [B], Modifying structures of inland water courses [J02.05.02]	sensitive to land use management and hydrological and groundwater interactions. This site is 13.55km from the proposed development. There are no sources for effect for direct land use management or habitat disturbance effects to the SAC as this site is outside of the proposed development boundary. There are no direct surface hydrological pathways between the proposed development and the SAC. There is a potential source for hydrological interaction via indirect connection of underground urban surface water drainage, however, there will be no significant change to surface water drainage infrastructure as a result of the proposed development as the change from approximately 7,500 m² of amenity grassland to permeable surfaces is not foreseen to significantly increase surface water run-off. The construction phase is both small in scale and of a temporary duration and due to the distances involved and dilution factor through indirect hydrological pathways, it is foreseen that there are no potential significant effects via indirect hydrological pathways. Therefore, there is no potential for likely significant effects in this regard. Regarding groundwater interactions; the proposed development will not change surface water drainage, and will not significantly change the volume of surface water run-off. Therefore, there is no likelihood for a pathway for effects to groundwater sensitive habitats as a result of the proposed development. Best practice measures will be in place for the construction phase (as outlined in the CEMP accompanying the application) for the proposed development.		

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
					Considering the QIs of this SAC, and given the nature of the proposed development and the distances involved; there are no potential sources for likely significant effects, and no further assessment is required.		
004006	North Bull Island SPA	13.55	Shelduck (Tadorna tadorna) [A048], Black-tailed Godwit (Limosa limosa) [A156], Curlew (Numenius arquata) [A160], Black-headed Gull (Chroicocephalus ridibundus) [A179], Sanderling (Calidris alba) [A144], Shoveler (Anas clypeata) [A056], Dunlin (Calidris alpina) [A149], Golden Plover (Pluvialis apricaria) [A140], Grey Plover (Pluvialis squatarola) [A141], Bar-tailed Godwit (Limosa lapponica) [A157], Pintail (Anas acuta) [A054], Redshank (Tringa totanus) [A162], Turnstone (Arenaria interpres) [A169], Teal (Anas crecca) [A052], Oystercatcher (Haematopus ostralegus) [A130], Knot (Calidris canutus) [A143], Light-bellied Brent Goose (Branta bernicla hrota) [A674], Wetland and Waterbirds [A999]	Other patterns of habitation [E01.04], Roads, motorways [D01.02], Interpretative centres [G03], Bridge, viaduct [D01.05], Bait digging or collection [F02.03.01], Walking, horseriding and non-motorised vehicles [G01.02], Discharges [E03], Golf course [G02.01], Shipping lanes [D03.02], Nautical sports [G01.01], Industrial or commercial areas [E02], Continuous urbanisation [E01.01]	Considering the Special Conservation Interests and known sensitivities of this European site in the context of the potential effects identified in S3.3.2, this SPA is sensitive to hydrological interactions, direct land use management and disturbance effects. The site is 13.55km from the proposed development There are no sources for effect for direct land use management or habitat disturbance effects to the SPA as this site is outside the proposed development boundary. There are no direct surface hydrological pathways between the proposed development and the SPA. There is a potential source for hydrological interaction via indirect connection of underground urban surface water drainage, however, there will be no significant change to surface water drainage infrastructure as a result of the proposed development as the change from approximately 7,500 m² of amenity grassland to permeable surfaces is not foreseen to significantly increase surface water run-off. The construction phase is both small in scale and of a temporary duration and due to the distances involved and dilution factor through indirect hydrological pathways, it is foreseen that there are no potential significant effects via indirect hydrological pathways. Therefore, there is no potential for likely significant effects in this regard. SCI species are sensitive to noise disturbance effects;	No	No

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
					in general distances beyond 2 km are seen to be sufficient to preclude such effects ^{14,15} . These distances can vary due to factors such as species and/or time of year ^{16,17} . Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard.		
					These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed development. However, given the current nature of the proposed development site as a highly disturbed amenity park, the scale of the proposed development and the availability of alternate resources, ensure the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard.		
					Considering the SCIs of this SPA, and given the nature of the proposed development and the distances involved; there are no potential sources for likely significant effects, and no further assessment is required.		
000205	Malahide Estuary SAC	13.57	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Salicornia and other annuals colonising mud and sand [1310], Mediterranean salt meadows (Juncetalia maritimi) [1410], Fixed coastal dunes with herbaceous vegetation - grey	Leisure fishing [F02.03], Industrial or commercial areas [E02], Urbanised areas, human habitation [E01], Reclamation of land from sea, estuary or marsh [J02.01.02], Nautical sports [G01.01], Bait digging or collection [F02.03.01],	Considering the Qualifying Interests and known sensitivities of this European site in the context of the potential effects identified in S3.3.2, this SAC is sensitive to land use management and hydrological and groundwater interactions. This site is 13.57 km from the proposed development. There are no sources for effect for	No	No

¹⁴ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

¹⁵ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

¹⁶ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
			dunes [2130], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Mudflats and sandflats not covered by seawater at low tide [1140]	Eutrophication (natural) [K02.03], Roads, motorways [D01.02], Walking, horse-riding and non-motorised vehicles [G01.02], Discharges [E03]	direct land use management or habitat disturbance effects to the SAC as this site is outside of the proposed development boundary. There are no direct or indirect hydrological pathways between the proposed development and the SAC, and therefore no potential for significant effects via hydrological interactions. Regarding groundwater interactions; the proposed development will not change surface water drainage, and will not significantly change the volume of surface water run-off. Therefore, there is no likelihood for a pathway for effects to groundwater sensitive habitats as a result of the proposed development. Best practice measures will be in place for the construction phase (as outlined in the CEMP accompanying the application) for the proposed development. Considering the QIs of this SAC, and given the nature of the proposed development, the lack of hydrological pathways and the distances involved; there are no potential sources for likely significant effects, and no further assessment is required.		
004025	Malahide Estuary SPA	13.64	Great Crested Grebe (Podiceps cristatus) [A005], Golden Plover (Pluvialis apricaria) [A140], Grey Plover (Pluvialis squatarola) [A141], Dunlin (Calidris alpina) [A149], Goldeneye (Bucephala clangula) [A067], Knot (Calidris canutus) [A143], Bar-tailed Godwit (Limosa lapponica) [A157], Black-tailed Godwit (Limosa limosa) [A156], Light-	Walking, horse-riding and non-motorised vehicles [G01.02], Bridge, viaduct [D01.05], Reclamation of land from sea, estuary or marsh [J02.01.02], Railway lines, TGV [D01.04], Fertilisation [A08], Industrial or commercial areas [E02], Urbanised areas, human habitation [E01], Paths, tracks, cycling tracks [D01.01],	Considering the Special Conservation Interests and known sensitivities of this European site in the context of the potential effects identified in S3.3.2, this SPA is sensitive to hydrological interactions, direct land use management and disturbance effects. The site is 13.64 km from the proposed development There are no sources for effect for direct land use management or habitat disturbance effects to the SPA as this site is outside the proposed development boundary.	No	No

Site Code	Site Name	Distance (km) ⁸	Qualifying Feature ⁹	Known Threats and Pressures	Potential Effects	Potential for Significant Effects	Potential for In- Combination Effects
			bellied Brent Goose (Branta bernicla hrota) [A674], Oystercatcher (Haematopus ostralegus) [A130], Pintail (Anas acuta) [A054], Redshank (Tringa totanus) [A162], Wetland and Waterbirds [A999], Shelduck (Tadorna tadorna) [A048], Redbreasted Merganser (Mergus serrator) [A069]	Nautical sports [G01.01], Invasive non-native species [I01]	There are no direct or indirect hydrological pathways between the proposed development and the SPA, and therefore no potential for significant effects via hydrological interactions. SCI species are sensitive to noise disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such effects ^{18,19} . These distances can vary due to factors such as species and/or time of year ^{20,21} . Given the distance between the proposed development area and the SPA there are no pathways for disturbance effects identified in this regard. These SCI species are highly vagile and therefore may utilise ex-situ ecological resources which may have interactions with the proposed development. However, given the current nature of the proposed development site as a highly disturbed amenity park, the scale of the proposed development and the availability of alternate resources, ensure the local scale interactions with ex-situ resources are not likely to have significant effects on the SPA in this regard. Considering the SCIs of this SPA, and given the nature of the proposed development, lack of hydrological pathways and the distances involved; there are no potential sources for likely significant effects, and no further assessment is required.		

¹⁸ Ruddock, M. and Whitfield, D.P., 2007. A review of disturbance distances in selected bird species. A report from Natural Research (Projects) Ltd to Scottish Natural Heritage, 181.

¹⁹ Bright, J.A., Langston, R. and Anthony, S., 2009. Mapped and written guidance in relation to birds and onshore wind energy development in England. Sandy: RSPB.

²⁰ Bötsch, Y., Tablado, Z. and Jenni, L., 2017. Experimental evidence of human recreational disturbance effects on bird-territory establishment. Proceedings of the Royal Society B: Biological Sciences, 284(1858), p.20170846.

¹² Goss-Custard, J.D., Hoppe, C.H., Hood, M.J. and Stillman, R.A., 2020. Disturbance does not have a significant impact on waders in an estuary close to conurbations: importance of overlap between birds and people in time and space. Ibis, 162(3), pp.845

3.5. Other plans and projects

Article 6(3) of the Habitats Directive requires an assessment of a plan or project to consider other plans or projects that might, in combination with the plan or project, have potential for significant effects European sites.

Section 3.2 - receiving environment overview - identifies the overall characteristics of the area with respect to existing condition and general land use. For considerations of in combination with respect to emerging or recent developments a search of the Dept of Housing, Local Government and Heritage planning database was undertaken to identify relevant plans and programmes which relate to the Proposed development. All developments from the receiving area were considered; the area considered is defined by the authoring ecologist using criteria which depend on the characteristics of the Proposed development and the associated sources (identified above); these criteria include:

- Having direct or indirect connectivity to a European site;
- Being in close proximity to a European site;
- Being of a substantial scale relative to the conditions and/or current works taking place in the surrounding landscape;
- Having disperse emissions or far-reaching sources for effects;
- Having sources for effects to ecological connectivity.

These factors are considered in the context of characteristics of the proposed development and on this basis a search radius of 200 m was selected to be used to search for projects within the receiving environment. The sources for effects from the proposed development are considered in combination with the potential sources for effects from the receiving environment for potential additive or interactive effects to the receiving environment.

Plans of relevance within the receiving environment or in-combination with effects arising from the proposed development:

Fingal Development Plan 2023-2029

Considering that the proposed development has a small-scale, temporary construction phase and the operational phase is consistent with the current site use, and the land use zoning of the above plan, it is not foreseen that proposed development will have any significant in-combination effects with the above plan.

Projects considered for possible in-combination effects from the proposed development:

Further to section 3.2 – which details the existing land uses and general characteristics of the area – a focus was placed on current and future development applications. To identify projects for consideration for the in-combination effects section, the Dept of Housing, Local Government and Heritage planning database was used²². A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years²³.

There are a number of other proposed developments in the vicinity of the proposed development

²² Accessed at: https://data-housinggovie.opendata.arcgis.com/datasets/planning-application-sites-2010-onwards; 26th April 2023

²³ Planning applications have a standard lifespan of 5 years as per Section 40 (3)(b) of the Planning & Development Act 2000, as amended; therefore, these are viewed to be the 'live' applications, all other projects are considered as part of the site other than refused and withdrawn applications, as these would not have any in-combination effects

including works which are at planning stage or underway on various sites. The database search found that the vast majority of projects within the area are relating to the construction and alteration of residential structures. Table 3.2 provides a list of the proposed developments within 200 m of the proposed development.

Due to the scale and nature of the proposed development, there is no potential for significant effects identified as a result of the implementation of the proposed development. On this basis, the assessment guidance given in CIEEM, 2018 indicates that there is no need to consider cumulative effects. However, in taking a precautionary approach, relevant plans and projects have nonetheless been reviewed and assessed in-combination with the proposed development.

The proposed development is localised, with a small scale, temporary construction phase, and an operational phase that is consistent with current site use and pressures. The projects listed in Table 3.2 below in the local area are small in scale with Appropriate Assessment and/or EIA screening carried out for each where required. Therefore, given the nature and scale of the proposed development, and the lack of any potential for significant effects, there are no in combination effects with the below projects or above plans that have been identified to have likely potential significant effects on any European site considered in this assessment.

Table 3.2 Local planning applications²⁴ relevant to the proposed development²⁵

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
FW18A/0137	Grant Permission	Permission for alterations and nominal amendments to the primary school redevelopment as permitted under parent permission Reg Ref. FW13A/0074 and extended permission Reg Ref. FW13A/0074 /E1 and to include: 1) Roof mounted photovoltaic panels of approx. 228m2, 2) Nominal increases in floor area totalling 246.9m2 due to alterations at the six fire exit stairs, JNS classrooms no's 1, 8, 11, 18, Junior staff room, Junior GP Hall, Special Ed no's 1, 2, 3, Junior Library, Boiler room, corridor width minor increases, and amendments to store room configurations at both ground and first floor. The proposed development also includes associated minor modifications to the permitted site layout and JNS access gates.	2018-12-17	23787.91	23,718.0	Permission	This is a medium-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No
FW21A/0152	Grant Permission & Grant	The development will consist of :- Permission for alterations, amendments and retention to the primary school	2021- 11-16	20524.47	21,200.0	Permission and Retention	This is a medium-scale project with a temporary construction phase and the	No	No

²⁴ The majority of surrounding developments within Dublin city are minor projects with no risk of in-combination effects. Therefore, a summary list of provided here of the five largest proposed developments within the below stated parameters

²⁵ Parameters used: planning application from within the last 5 years, within a radius of 200m around the proposed development boundary

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
	Retention	redevelopment as permitted under parent permission Ref. FW13A/0074 (extended under FW13A/0074/E1) and amended under FW18A/0137 to include: 1- Addition of Special Education Needs (SEN) facilities and consequent alterations to permitted school design. Overall building area increase 1159 sqm. Approved two storey JNS building volume extended 12.6m north and 4m west and new single-story extension (255 sqm) to approved eastern elevation. Addition of 4 no. SEN classrooms, 2 no. multi-sensory rooms, 2 no. central activities spaces, 2 no. offices, and ancillary facilities. Consequent alterations to approved JNS layout including relocation of approved teaching spaces and additional secondary entrance, meeting room, social space and first floor external terrace overlooking inner courtyard. 2- Amendments to approved landscaping including relocation of ballcourt and addition of enclosed SEN play areas, and 6 SEN Parking spaces. 3-Retention of two storey infill (75sqm) comprising staffroom and meeting room in SNS courtyard and minor alterations to internal layout. Permitted pitched roof heights nominally increased. 4- Permission for 2.4m high external enclosure (20sqm) for storage and services.					operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW23A/0253	Grant	Planning permission sought for proposed front single storey extensions and	N/A	784.20	420.0	Permission	This is a small-scale project with a temporary	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
	Permission	associated external frontage signage with associated site development works to each existing ground floor level units (ground floor level extension to unit 3B as is a two-storey unit); proposed enclosure of existing two storey external stairs at units 1, 2, 3, 3B, 4 and 5 and external stairs of Corduff Shopping Centre, Corduff, Dublin 15 for Bertha Enterprises Ltd.					construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW18A/0035	Grant Permission	Change of use from medical surgery to domestic dwelling to include a 2-storey extension to side and single storey extension to front and rear. Additional Information lodged 28th May 2018 is now deemed Significant (31/05/18)	2018- 08-13	484.56		Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
							the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW22A/0259	Grant Permission	Planning permission for 1) Removal of existing single storey extension at gable end of house & the construction of a two-storey detached house on site at side of existing house. 2) The construction of a single storey extension to rear of existing house, also small tiled canopy to front of existing house and re-instatement of hall door & screen to gable of existing house. 3) Also all associated site works including new vehicular entrances to serve new & existing house at 12 Brookhaven Rise, Blanchardstown, Dublin 15. D15 YA9N	2023- 02-15	372.59		Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
FW21A/0114	Grant Permission	Permission for a 2-bedroom semidetached house in the side garden & new driveway entrance to include new pavement dish with alterations to the existing pavement dish to allow access for both driveways. Al received 17/12/21	2022-03-03	326.85	1,600.0	Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No
FW19A/0227	Grant Permission	Planning permission for the construction of a new detached 2 storey 3-bedroom dwelling to the east of the existing detached dwelling and construction of a new vehicular entrance to serve the dwelling 1 Edgewood Lawn and all associated works	2020- 08-13	272.68	53.0	Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
		Additional Information Lodged on 9th June 2020					Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW19A/0171	Grant Permission	The removal of existing blockwork shed built on boundary wall abutting neighbour's blockwork shed and construction of new single story extension to rear of 17.5m2 with new lean to shed to side passageway of 9m2 and widening of front vehicular driveway to 3.6 m, and all associated site works.	2020- 01-14	229.03	208.0	Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
							sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW21A/0105	Grant Permission	Single storey extension to front (gross 7sqm), single storey bay window to rear (gross 1.5sqm), addition of first floor window to rear, provision of a roof-light to front elevation to service landing. Widening of existing driveway to 5 metres and dishing of public kerb to accommodate same, and all ancillary works.	2021-09-16	177.41	165.0	Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No
FW23A/0226	Grant Permission	Planning permission sought for proposed change of use from retail shop to medical dentist surgery use with front single storey	N/A	125.80		Permission	This is a small-scale project with a temporary construction phase and the	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
		extension and associated external frontage signage and rear single storey extension with associated site development works to existing ground floor level unit at Unit 6, Corduff Shopping Centre, Corduff, Dublin 15, D15 K597					operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW18A/0018	Grant Permission	Full planning permission sought for change of use of existing externally accessed single storey mid-terrace vacant Beauty Salon to Licensed Betting Office to include for all associated internal alterations, new shopfront signage to front (northwest) & high level wall mounted satellite dish & air conditioning condenser unit to rear (southeast) elevations together with all associated site development works at Unit No. 3, Corduff Shopping Centre, Blackcourt Road, Corduff, Blanchardstown, Dublin 15. For Ladbrokes (IRL) Ltd.	2018- 04-30	83.36		Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
							the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW18B/0140	Grant Permission	Construction of a single-storey extension to the side	2019- 03-19	0.12	198.0	Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
FW22B/0118	Grant Permission	The demolition of the existing garden shed and existing single storey extension at the rear and the construction of a new single storey extension at the rear along with ancillary site works.	2023-02-28	0.12	168.0	Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No
FW19B/0004	Grant Permission	Permission sought for a single storey extension to the side to be used as a granny flat.	2019- 04-24	0.12		Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment.	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
							Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW19B/0087	Grant Permission	Domestic extension including utility, W.C. to side of existing property, with a single mono pitched roof.	2019- 09-25	0.12		Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
							sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW21B/0155	Grant Permission For Retention	Retention of construction of single storey canopy extension to front of existing dwelling, and associated site works.	2022-01-13	0.12	197.0	Retention	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No
FW19B/0002	Grant Permission	Single storey extension to side and rear of existing dwelling & all associated site	2019- 04-09	0.12		Permission	This is a small-scale project with a temporary construction phase and the	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
		works.					operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW23B/0030	Grant Permission	Permission to construct dormer attic conversion with flat roof dormer/dormer windows on rear roof	2023- 08-30	0.10	0.10	Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
							the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.		
FW19B/0047	Grant Permission	Planning Permission for Single storey extension to gable end and rear of house, also all associated site works.	2019- 07-16	0.12		Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No

Project Code	Decision	Description	Grant Date	Project Area (sq m)	Area of Site (where provided)	Status	Characteristics of the potential interactions between the projects; sources and pathways	Is there a risk of in- combination effects	Are significant in- combination effects likely
FW18B/0054	Grant Permission	Permission for the construction of a single storey kitchen extension to the front/side of 22 Corduff Place.	2018- 07-30	0.12	261.0	Permission	This is a small-scale project with a temporary construction phase and the operational phase will have localised effects that will be in keeping with the context and character of the surrounding environment. Considering the above, in combination with the lack of any potential for effects to European sites arising from the proposed development, it is not considered that there is any potential for significant in-combination effects to any European sites. The consent process for this project was subject to applicable EIA and AA requirements.	No	No

4. Conclusion

This stage one screening for AA for the proposed Corduff Park Upgrade at Corduff, Corduff, Dublin 15 demonstrates that the proposed development is not likely to have potential for significant effects to any European sites.

The AA screening process has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the proposed development. Through an assessment of the potential sources and pathways for significant effects, and an evaluation of the project characteristics, and the site context and character; taking account of the processes involved and the distance of separation from European sites; it has been evaluated that potential significant effects to the Conservation Objectives of Qualifying Interests and Special Conservation Interests of any designated European site are not likely to occur as a result of the implementation of the proposed development.

Given the nature of the proposed development, the site context and characteristics, and distance from European site, it is predicted that the proposed development will not lead to any potential significant in-combination effects when considered with potential effects arising from any other plans or projects.

The proposed development is not foreseen to have any likelihood of significant effects on any European sites, alone or in combination with other plans or projects — and therefore any potential for significant effect to any European site as a result of the proposed scheme can be ruled out. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated. Consequently, a Stage Two AA (NIS) is not required.

Appendix I Background information on European sites²⁶

Site Code	Site Name	Qualifying Feature	Pressure Codes	Known Threats and Pressures
000205	Malahide Estuary SAC	Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Salicornia and other annuals colonising mud and sand [1310], Mediterranean salt meadows (Juncetalia maritimi) [1410], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Mudflats and sandflats not covered by seawater at low tide [1140]	A08, E01, F03.01, I01, X, D01.02, D01.05, G01.01, G01.03, J02.01.02, G02.01, G01.02	Fertilisation, urbanised areas, human habitation, hunting, invasive non-native species, no threats or pressures, roads, motorways, bridge, viaduct, nautical sports, motorised vehicles, reclamation of land from sea, estuary or marsh, golf course, walking, horse-riding and non-motorised vehicles
000206	North Dublin Bay SAC	Petalwort (Petalophyllum ralfsii) [1395], Mudflats and sandflats not covered by seawater at low tide [1140], Embryonic shifting dunes [2110], Humid dune slacks [2190], Mediterranean salt meadows (Juncetalia maritimi) [1410], Shifting dunes along the shoreline with Ammophila arenaria - white dunes [2120], Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330], Fixed coastal dunes with herbaceous vegetation - grey dunes [2130], Salicornia and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210]	A04, H01.09, I01, F02.03.01, E01, E02, F02.03, H01.03, G02.01, G01.02, K03.06, G05.05, E03, J01.01, G01.01	Grazing, diffuse pollution to surface waters due to other sources not listed, invasive non-native species, bait digging or collection, urbanised areas, human habitation, industrial or commercial areas, leisure fishing, other point source pollution to surface water, golf course, walking, horse-riding and non-motorised vehicles, antagonism with domestic animals, intensive maintenance of public parcs or cleaning of beaches, discharges, burning down, nautical sports
000210	South Dublin Bay SAC	Annual vegetation of drift lines [1210], Embryonic shifting dunes [2110], Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310]	H03, K02.02, D01.02, G01.02, K02, D01.01, E01, M01, E03, J02.01.02, G01.01.02, E02, F02.03.01, G01.01	Marine water pollution, accumulation of organic material, roads, motorways, walking, horse-riding and non-motorised vehicles, biocenotic evolution, succession, paths, tracks, cycling tracks, urbanised areas, human habitation, changes in abiotic conditions, discharges, reclamation of land from sea, estuary or marsh, non-motorized nautical sports, industrial or commercial areas, bait digging or collection, nautical sports
001398	Rye Water Valley/Carton SAC	Narrow-mouthed whorl snail (Vertigo angustior) [1014], Petrifying springs with tufa formation (Cratoneurion) [7220], Desmoulin`s whorl snail (Vertigo moulinsiana) [1016]	A04, D01.02, E01.01, A08, A10.01, E01.03, B, J02.05.02	Grazing, roads, motorways, continuous urbanisation, fertilisation, removal of hedges and copses or scrub, dispersed habitation, sylviculture, forestry, modifying structures of inland water courses

²⁶ That have functional connectivity (ecological pathways) to the proposed development area including their Qualifying Interests, known threats and pressures

Site Code	Site Name	Qualifying Feature	Pressure Codes	Known Threats and Pressures
004006	North Bull Island SPA	Shelduck (<i>Tadorna tadorna</i>) [A048], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Curlew (<i>Numenius arquata</i>) [A160], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Sanderling (<i>Calidris alba</i>) [A144], Shoveler (<i>Anas clypeata</i>) [A056], Pintail (<i>Anas acuta</i>) [A054], Redshank (<i>Tringa totanus</i>) [A162], Turnstone (<i>Arenaria interpres</i>) [A169], Teal (<i>Anas crecca</i>) [A052], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Knot (<i>Calidris canutus</i>) [A143], Lightbellied Brent Goose (<i>Branta bernicla hrota</i>) [A674], Wetland and Waterbirds [A999], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Dunlin (<i>Calidris alpina</i>) [A149], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Grey Plover (<i>Pluvialis squatarola</i>) [A141]	E01.04, D01.02, G03, D01.05, F02.03.01, G01.02, E03, G02.01, D03.02, G01.01, E02, E01.01	Other patterns of habitation, roads, motorways, interpretative centres, bridge, viaduct, bait digging or collection, walking, horseriding and non-motorised vehicles, discharges, golf course, shipping lanes, nautical sports, industrial or commercial areas, continuous urbanisation
004024	South Dublin Bay and Tolka Estuary SPA	Knot (Calidris canutus) [A143], Ringed Plover (Charadrius hiaticula) [A137], Light-bellied Brent Goose (Branta bernicla hrota) [A674], Oystercatcher (Haematopus ostralegus) [A130], Wetland and Waterbirds [A999], Arctic tern (Sterna paradisaea) [A194], Roseate Tern (Sterna dougallii) [A192], Sanderling (Calidris alba) [A144], Bar-tailed Godwit (Limosa lapponica) [A157], Black-headed Gull (Chroicocephalus ridibundus) [A179], Common tern (Sterna hirundo) [A193], Dunlin (Calidris alpina) [A149], Grey Plover (Pluvialis squatarola) [A141], Redshank (Tringa totanus) [A162]	F02.03, E02, E01, J02.01.02, G01.01, F02.03.01, K02.03, D01.02, G01.02, E03	Leisure fishing, industrial or commercial areas, urbanised areas, human habitation, reclamation of land from sea, estuary or marsh, nautical sports, bait digging or collection, eutrophication (natural), roads, motorways, walking, horse-riding and non-motorised vehicles, discharges
004025	Broadmeadow/Swords Estuary SPA	Great Crested Grebe (Podiceps cristatus) [A005], Golden Plover (Pluvialis apricaria) [A140], Grey Plover (Pluvialis squatarola) [A141], Dunlin (Calidris alpina) [A149], Goldeneye (Bucephala clangula) [A067], Knot (Calidris canutus) [A143], Bar-tailed Godwit (Limosa lapponica) [A157], Black-tailed Godwit (Limosa limosa) [A156], Light-bellied Brent Goose (Branta bernicla hrota) [A674], Oystercatcher (Haematopus ostralegus) [A130], Pintail (Anas acuta) [A054], Redshank (Tringa totanus) [A162], Wetland and Waterbirds [A999], Shelduck (Tadorna tadorna) [A048], Red-breasted Merganser (Mergus serrator) [A069]	G01.02, D01.05, J02.01.02, D01.04, A08, E02, E01, D01.01, G01.01, I01	Walking, horse-riding and non-motorised vehicles, bridge, viaduct, reclamation of land from sea, estuary or marsh, railway lines, tgv, fertilisation, industrial or commercial areas, urbanised areas, human habitation, paths, tracks, cycling tracks, nautical sports, invasive non-native species

Appendix II Qualifying Interests of SACs that have undergone assessment²⁷

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
[1014]	Narrow-mouthed Whorl Snail (Vertigo angustior)	Pressures facing this species are associated with land abandonment, under-grazing and the creation of tourism and leisure infrastructure such as caravan sites and golf courses.	A06, A10, F05, F07	Abandonment of grassland management (e.g., cessation of grazing or of mowing), extensive grazing or under grazing by livestock, creation or development of sports, tourism and leisure infrastructure (outside the urban or recreational areas), sports, tourism and leisure activities	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
[1016]	Desmoulin's Whorl Snail (Vertigo moulinsiana)	The main pressures are associated with natural succession resulting in species composition change and drying out of the habitat.	A07, A10, L01, L02	Abandonment of management/use of other agricultural and agroforestry systems (all except grassland), extensive grazing or under grazing by livestock, abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization), natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Changes to ground vegetation condition, groundwater dependent and is highly sensitive to hydrological changes.
[1140]	Mudflats and sandflats not covered by seawater at low tide	Pressures on mudflats and sandflats are partly caused by pollution from agricultural, forestry and wastewater sources, as well as impacts associated with marine aquaculture, particularly the Pacific oyster (Magallana gigas).	A28, F20, G16	Agricultural activities generating marine pollution, residential or recreational activities and structures generating marine pollution (excl. marine macroand micro- particular pollution, marine aquaculture generating marine pollution	Surface and marine water dependent. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Changes to salinity and tidal regime. Coastal development.
[1210]	Annual vegetation of drift lines	Most of the pressures on drift lines are associated with activities such as recreation and coastal defences, which can interfere with sediment dynamics.	C01, F01, F06, F07, F08	Extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions), development and maintenance of beach areas for	Overgrazing and erosion. Changes in management.

²⁷ Including known treats and pressures and sensitivities of qualifying interests

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
				tourism and recreation incl. beach nourishment and beach cleaning, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures)	
[1310]	Salicornia and other annuals colonising mud and sand	Pressures on Salicornia mud are caused by alien species and overgrazing by livestock	A09, I02	Intensive grazing or overgrazing by livestock, other invasive alien species (other than species of union concern)	Marine water dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Infilling, reclamation, invasive species.
[1330]	Atlantic salt meadows (Glauco- Puccinellietalia maritimae)	The main pressures on Atlantic salt meadows are from agriculture, including ecologically unstable grazing regimes and land reclamation, and the invasive nonnative species common cord-grass (Spartina anglica).	A09, A33, A36, F07, F08, I02	Intensive grazing or overgrazing by livestock, modification of hydrological flow or physical alternation of water bodies for agriculture (excluding development and operation of dams), agriculture activities not referred to above, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern)	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.
[1395]	Petalwort (Petalophyllum ralfsii)	There are no pressures facing this species.	Xxp, Xxt	No pressures, no threats	None identified.
[1410]	Mediterranean salt	Most of the pressures on Mediterranean	A09, A10, A33, A36	Intensive grazing or overgrazing by	Marine and groundwater dependent.

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
	meadows (Juncetalia maritimi)	salt meadows are associated with agriculture, including overgrazing, undergrazing and land reclamation.		livestock, extensive grazing or under grazing by livestock, modification of hydrological flow or physical alternation of water bodies for agriculture (excluding development and operation of dams), agriculture activities not referred to above	Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Coastal development and reclamation.
[2110]	Embryonic shifting dunes	The majority of pressures on this habitat are associated with recreation and coastal defences, which can interfere with sediment dynamics.	C01, E03, F01, F06, F07, F08, L01, L02	Extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), shipping lanes, ferry lanes and anchorage infrastructure (e.g., canalisation, dredging), conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions), development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization), natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Overgrazing, and erosion. Changes in management.
[2120]	Shifting dunes along the shoreline with white dunes	Most of the pressures on marram dunes are caused by the interference on sediment dynamics due to recreation and	E01, E03, F01, F06, F07, F08, I02, L01	Roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), shipping lanes, ferry lanes and	Overgrazing, and erosion. Changes in management.

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
	(Ammophila arenaria)	coastal defences.		anchorage infrastructure (e.g., canalisation, dredging), conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions), development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern), abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization)	
[2130]	Fixed coastal dunes with herbaceous vegetation (grey dunes)	Pressures on fixed dunes are associated with recreation and ecologically unsuitable grazing practices.	A02, A09, A10, F07, F08, I02, L02	Conversion from one type of agricultural land use to another (excluding drainage and burning), intensive grazing or overgrazing by livestock, extensive grazing or under grazing by livestock, sports, tourism and leisure activities, modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defence or coast protection works and infrastructures), other invasive alien species (other than species of union concern), natural succession resulting in	Overgrazing, and erosion. Changes in management.

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
				species composition change (other than by direct changes of agricultural or forestry practices)	
[2190]	Humid dune slacks (Humid dune slacks)	Pressures on the habitat come from a number of sources. Including agricultural fertilisers, sports and leisure activities (e.g., walking, off-road driving and golf courses) and drainage. Succession to scrub is also a problem, particularly where it is linked to desiccation of the slack.	A19, A31, F07, I02, L02	Application of natural fertilisers on agricultural land, drainage for use as agricultural land, sports, tourism and leisure activities, other invasive alien species (other than species of union concern), natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Overgrazing, and erosion. Changes in management. Sensitive to hydrological change.
[7220]	Petrifying springs with tufa formation (Cratoneurion)	Pressures related to this habitat are associated with drainage, pollution to ground and surface waters, recreational activities, infrastructure, overgrazing and abandonment of grassland management.	A06, A10, E01, F07, H08, J01, K02, K04, L02	Abandonment of grassland management (e.g., cessation of grazing or of mowing), extensive grazing or under grazing by livestock, roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), sports, tourism and leisure activities, other human intrusions and disturbance not mentioned above (dumping, accidental and deliberate disturbance of bat roosts (e.g., caving)), mixed source pollution to surface and ground waters (limnic and terrestrial), drainage, modification of hydrological flow, natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices)	Surface and groundwater dependant. Highly sensitive to hydrological changes. Highly sensitive to pollution.

Appendix III Special Conservation Interests of SPAs that have undergone assessment $^{\rm 28}$

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
A048	Common Shelduck	Tadorna tadorna	F01, F02, G01, H03, M01	Marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, changes in abiotic conditions
A054	Northern Pintail	Anas acuta	C03, F01, F03, G01, H01, H03, H07, J02	Renewable abiotic energy use, marine and freshwater aquaculture, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution, human induced changes in hydraulic conditions
A056	Northern Shoveler	Anas clypeata	C03, F03, G01, H01, H03, H07	Renewable abiotic energy use, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution
A067	Common Goldeneye	Bucephala clangula	C03, F01, F03, G01, H01, H03, H07, M02	Renewable abiotic energy use, marine and freshwater aquaculture, hunting and collection of wild animals (terrestrial), outdoor sports and leisure activities, recreational activities, pollution to surface waters (limnic & terrestrial, marine & brackish), marine water pollution, other forms of pollution, changes in biotic conditions
A069	Red-Breasted Merganser	Mergus serrator	C03, F01, F02, G01, H03	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution
A130	Eurasian Oystercatcher	Haematopus ostralegus	C03, F01, F02, G01, H03, J02	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions
A137	Common Ringed Plover	Charadrius hiaticula	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure

²⁸ Including known treats and pressures of SCIs

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
				activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A140	European Golden Plover	Pluvialis apricaria	A02, A04, B01, C01, C03, F01, G01, H03, J01, K03, M02	Modification of cultivation practices, grazing, forest planting on open ground, mining and quarrying, renewable abiotic energy use, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, marine water pollution, fire and fire suppression, interspecific faunal relations, changes in biotic conditions
A141	Grey Plover	Pluvialis squatarola	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A143	Red Knot	Calidris canutus	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A144	Sanderling	Calidris alba	C03, F01, G01, H03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, marine water pollution, changes in abiotic conditions
A149	Dunlin	Calidris alpina	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A157	Bar-Tailed Godwit	Limosa lapponica	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
				modifications, changes in abiotic conditions
A162	Common Redhank	Tringa totanus	C03, F01, F02, G01, H03, J02, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, fishing and harvesting aquatic resources, outdoor sports and leisure activities, recreational activities, marine water pollution, human induced changes in hydraulic conditions, other ecosystem modifications, changes in abiotic conditions
A169	Ruddy Turnstone	Arenaria interpres	C03, F01, G01, H03, J03, M01	Renewable abiotic energy use, marine and freshwater aquaculture, outdoor sports and leisure activities, recreational activities, marine water pollution, other ecosystem modifications, changes in abiotic conditions
A179	Black-Headed Gull	Larus ridibundus	A04, C03, F02, H03, J03, M01	Grazing, renewable abiotic energy use, fishing and harvesting aquatic resources, marine water pollution, other ecosystem modifications, changes in abiotic conditions
A193	Common Tern	Sterna hirundo	C03, D01, D03, G01, I01	Renewable abiotic energy use, roads, paths and railroads, shipping lanes, ports, marine constructions, outdoor sports and leisure activities, recreational activities, invasive non-native species
A194	Arctic Tern	Sterna paradisaea	C03, D01, G01, I01, M01	Renewable abiotic energy use, roads, paths and railroads, outdoor sports and leisure activities, recreational activities, invasive nonnative species, changes in abiotic conditions

Appendix IV Conservation Objectives Documents List²⁹

NPWS (2013) Conservation Objectives for Malahide Estuary SAC [IE0000205] Version 1.

NPWS (2013) Conservation Objectives for North Dublin Bay SAC [IE0000206] Version 1.

NPWS (2013) Conservation Objectives for South Dublin Bay SAC [IE0000210] Version 1.

NPWS (2021) Conservation Objectives for Rye Water Valley/Carton SAC [IE0001398] Version 1.

NPWS (2015) Conservation Objectives for North Bull Island SPA [IE0004006] Version 1.

NPWS (2015) Conservation Objectives for South Dublin Bay and River Tolka Estuary SPA [IE0004024] Version 1.

NPWS (2013) Conservation Objectives for Malahide Estuary SPA [IE0004025] Version 1.

²⁹ Source: NPWS/Department of Culture, Heritage and the Gaeltacht

Appendix V Contributor Details

Author - Callum O'Regan is an ecologist who holds a B.Sc. degree in Zoology from University College Cork and obtained a Master's degree in Conservation Behaviour from Galway-Mayo Institute of Technology in 2021. Callum has skills in data management and analysis, report writing and mapping. Callum has also worked on the fieldwork for and preparation of a number of reports including Ecological Impact Assessments (EcIAs) and Appropriate Assessment Screenings for private and public projects of various sizes and complexities.

Supervisor - Karen Dylan Shevlin is an ecologist with over 9 years' experience working in multiple capacities in ecology in Irish and international research institutions and organisations, and holds a MSc degree in Biodiversity and Conservation from Trinity College Dublin (2013). Karen has significant skills in leading ecological surveys of bats, birds, insects, habitats and mammals and data analysis, mapping and compiling reports. Karen has worked on producing AA screenings, NISs, and EIARs for a range of public and private projects ranging from smaller facilities upgrades projects to major wind turbine sites. Karen is also a specialist in ecological theory and the impacts/effects that altering natural dynamics may have on the surrounding environment. This combination of skills and knowledge provides the backbone of the assessment process, and ensure that all of the baseline and detailed data gathered in the field is interpreted in a manner that is grounded in best scientific knowledge.

Reviewer - Paul Fingleton has an MSc in Rural and Regional Resources Planning (with specialisation in EIA) from the University of Aberdeen. Paul is a member of the International Association for Impact Assessment as well as the Institute of Environmental Management and Assessment. He has over twenty-five years' experience working in the area of Environmental Assessment. Over this period, he has been involved in a diverse range of projects including contributions to, and co-ordination of, numerous complex EIARs and EIA screening reports. He has also contributed to and supervised the preparation of numerous AAs and AA screenings.

Paul is the lead author of the current EPA Guidelines and accompanying Advice Notes on EIARs. He has been involved in all previous editions of these statutory guidelines. He also provides a range of other EIA related consultancy services to the EPA. Paul is regularly engaged by various planning authorities and other consent authorities to provide specialised EIA advice.