Appropriate Assessment Screening Report

for the proposed

Laurel Lodge Park Playground, Castleknock, 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 Laurel Lodge Park Playground, Castleknock, 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:

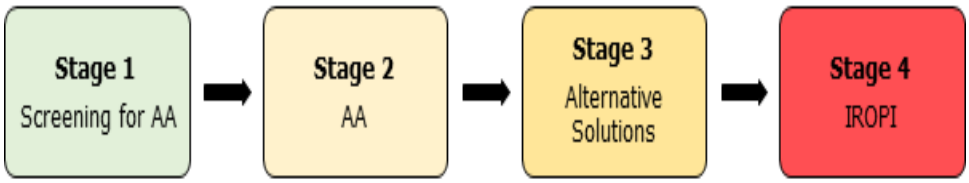
> *'A coherent European ecological network of special areas of conservation shall be set up under the title Natura 2000. This network, composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, shall enable the natural habitat types and the species' 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 15km[1] of the subject lands;
- Identification of European sites pathways for effects from the site have been identified (if relevant[2]) 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 likely 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 receptor[3].

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 Blanchardstown, west Dublin City. The proposed site is approximately . 0.106 ha, within a small amenity park, which contains parkland trees and amenity grassland, called Laurel Lodge Green. The park is immediately bordered by the Castleknock Road to the east, housing developments to the south and east, and the main train line connecting Dublin city to the west of Ireland and royal canal to the north (Figure 2.1). In the wider context of the local area, the area is highly developed suburban housing, with the M50 motorway to the south east (Figure 2.2). The Royal Canal flows through Dublin City and reaches Dublin Bay via the Tolka River Estuary. Although the Royal Canal is nearby, there is no direct hydrological connection with the canal. There is indirect connectivity via surface water drainage.

2.2. The Proposed Development

The proposed development comprises:

- A Local Equipped Area for Play (LEAP) [4] playground, approximately 400 m^2 in area, constructed in line with the principles of universal design[5].
- 5 Play items including multi play & natural play items. Play area to be finished with permeable safety surfacing.
- New 1.2 m high bow topped metal rail fencing & gates finished black in colour, enclosing the proposed play area.
- 1 new drinking water fountain.
- Landscaping including mounding (to a maximum height of 1.5 m) and tree planting to the south-west of the proposed playground.
- 10 bicycle parking spaces using Sheffield type or similar bicycle stands, located adjacent to the proposed playground.
- All other ancillary site works

The total proposed site area is approx. 0.106 ha. See Figure 2.3 for the plan of the proposed development.

[4] An unsupervised area equipped for children of early school age and within five minutes walking time of home.
[5] https://universaldesign.ie/what-is-universal-design/

Figure 2.1. Site location map

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

Figure 2.3. Site plan including showing proposed location of construction compound

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", "Qualifying Interests" (QIs) and/ or "Special Conservation Interests" (SCIs) 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 Table 3.1 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 Synopses[6]; and
- NATURA 2000 Standard Data Forms[6].

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.

[6] 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 26th October 2022

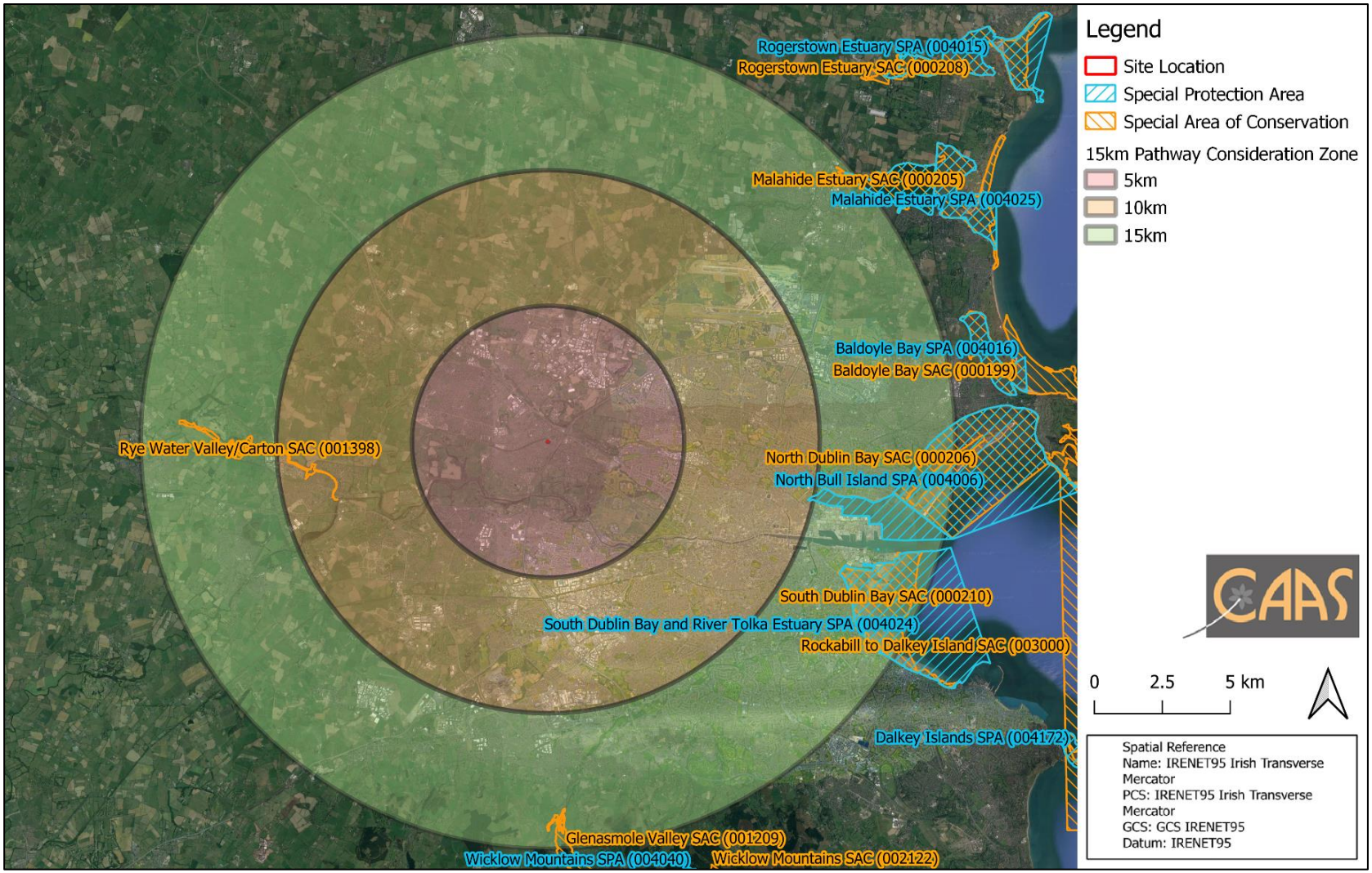


Figure 3.1. European sites within 15km of the proposed development boundary[7]

[7] 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).

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 at a local scale.

Construction phase

There is potential for disturbance effects through construction related noise, increased dust, run off, and earthworks removals.

Operational phase

As the proposed development aims to provide for a Local Equipped Area for Play (LEAP) within the current Laurel Lodge amenity park, there will be permanent loss of amenity grassland of an area of 0.106 ha. As visitors already frequent the park which is centred in a highly developed suburban housing area, it is not expected that the provision of LEAP facilities will result in any significant increase in visitors or noise levels. No drainage system alterations will occur as a result of the proposed development; therefore, surface drainage will not present any 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

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

Operation

- 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 2.1.

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, Environmental Protection Agency and 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 60+ 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 guidance[8] outlines the types of effects that may affect European sites. These include effects from

[8] 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

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 2.1 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 and the closest European site, the Rye Water Valley/Carton SAC is 7.93km from the proposed development area. There are also no sources for potential for significant effects via surface water drainage / hydrological connectivity as a result of the proposed development. There were no Annex I habitats or supporting habitat for Annex II species identified within the proposed development boundary. Therefore, there will be no effects posed regarding loss of 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 site. Although there will be a permanent loss of a patch of amenity grassland of an area of 0.106 ha within Laurel Lodge Park as a result of the proposed development, this is considered to be a relatively minor loss, and the vast majority of the site will remain unchanged. In addition, the receiving environment of the proposed development site has an overall low local ecological value for foraging SCI species due to high disturbance levels.

Disturbance to key species

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

There will be an increase in noise and dust levels during the construction phase, but these will be minor due to the small scale and temporary duration of the construction phase. The operational phase of the project will be very similar to the current noise and disturbance levels of Laurel Lodge Green Park. The site is over 9.8km from the nearest SPA which is a sufficient distance to ensure that disturbance effects through noise in the construction phase are unlikely to provide a source for

potential significant effects to SCI species. There will also be no change to operational phase lighting as a result of the proposed project. A CEMP accompanies this application and has outlined the best practice measures and appropriate management for all aspects of the construction phase.

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. There are no sources for indirect disturbances to SCI species from surrounding SPAs in terms of ex-situ foraging, as the patch of amenity grassland to be lost is minor (0.106 ha), and within a highly disturbed local amenity park and is thus unlikely to provide a source for potential significant effects to SCI species.

Reduction in species density

As mentioned, although there will be a permanent loss of a patch of amenity grassland of an area of 0.106 hawithin Laurel Lodge Park as a result of the proposed development, this is considered to be a relatively minor loss, and the vast majority of the site will remain unchanged. In addition, the receiving environment of the proposed development site has an overall low local ecological value for foraging SCI species due to high disturbance levels. Although the Royal Canal is nearby to the north of the proposed site, which links to European sites in Dublin Bay, approximately 9km from the proposed development; there is no direct hydrological connection with the canal. There is indirect connectivity via surface water drainage, however there will be no change to surface water drainage as a result of the proposed development. The replacement of approximately 0.106 haof amenity grassland with a permeable surface will not cause any significant changes in surface water run-off. The construction phase effects will also be small scale and temporary. In addition, the proposed site is surrounded by amenity grassland, the majority if which remains unchanged, and which will continue to percolate surface and storm water. 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 the Conservation Objectives of many European sites. Although the Royal Canal is nearby to the north of the proposed site, which links to European sites in Dublin Bay, approximately 9km from the proposed development; there is no direct hydrological connection with the canal. There is indirect connectivity via surface water drainage, however there will be no change to surface water drainage as a result of the proposed development. The replacement of approximately 0.106 haof amenity grassland with a permeable surface will not cause any significant increase of surface water run-off. The construction phase effects will also be small scale and temporary. In addition, the proposed site is surrounded by amenity grassland, the majority if which remains unchanged, and which will continue to percolate surface and storm water. In addition, a CEMP accompanies this application and has outlined the best practice measures and appropriate management for all aspects of 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 from the operational phase of the proposed project due to the nature of the proposed development as a Local Equipped Area for Play (LEAP) playground, 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 [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
001398	Rye Water Valley/Carton SAC	7.93	Petrifying springs with tufa formation *(Cratoneurion)* [7220], Desmoulin`s whorl snail *(Vertigo moulinsiana)* [1016], Narrow-mouthed whorl snail *(Vertigo angustior)* [1014]	Fertilisation [A08], Bridge, viaduct [D01.05], Hunting [F03.01], Urbanised areas, human habitation [E01], Reclamation of land from sea, estuary or marsh [J02.01.02], Invasive non-native species [I01], Golf course [G02.01], Roads, motorways [D01.02], Motorised vehicles [G01.03], Walking, horse-riding and non-motorised vehicles [G01.02], Nautical sports [G01.01]	In the context of the potential effects identified as a result the proposed development in s3.3.2, and considering the known threats and pressures of this European site; this SAC is sensitive to hydrological interactions, pollution, direct land use management, and groundwater interactions. This site is 7.93km 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 regarding indirect surface water run-off and underground surface water drainage infrastructure, however there will be no change to drainage as a result of the proposed development, and the change of an area of 0.106 hafrom amenity grassland to permeable surfaces is minor and is not foreseen to significantly increase surface water run-off. Therefore, there is no potential for likely significant effect 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. 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	No	No

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

Site Code	Site Name	Distance [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
					assessment is required.		
004024	South Dublin Bay and River Tolka Estuary SPA	9.81	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 ridibundus)* [A179]	Grazing [A04], Bait digging or collection [F02.03.01], Discharges [E03], Leisure fishing [F02.03], Invasive non-native species [I01], Other point source pollution to surface water [H01.03], Burning down [J01.01], Industrial or commercial areas [E02], Golf course [G02.01], Intensive maintenance of public parcs or cleaning of beaches [G05.05], Nautical sports [G01.01], Walking, horse-riding and non-motorised vehicles [G01.02], Diffuse pollution to surface waters due to other sources not listed [H01.09], Urbanised areas, human habitation [E01], Antagonism with domestic animals [K03.06]	In the context of the potential effects identified as a result the proposed development in s3.3.2, and considering the known threats and pressures of this European site; this SPA is sensitive to hydrological interactions, direct land use management and disturbance effects. This site is 9.81km 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 SPA. There is a potential source regarding indirect surface water run-off and underground surface water drainage infrastructure, however there will be no change to drainage as a result of the proposed development, and the change of an area of 0.106 hafrom amenity grassland to permeable surfaces is minor and is not foreseen to significantly increase surface water run-off. Therefore, there is no potential for likely significant effect 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. An area of 0.106 ha of amenity	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.

[13] 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 [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
					grassland will be permanently lost as a result of the proposed development. However, given the minor area of amenity grassland that will be lost in the context of the entire Laurel Lodge Green 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	11.71	Mudflats and sandflats not covered by seawater at low tide [1140], Salicornia and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210], Embryonic shifting dunes [2110]	Urbanised areas, human habitation [E01], Bait digging or collection [F02.03.01], Walking, horse-riding and non-motorised vehicles [G01.02], Marine water pollution [H03], Roads, motorways [D01.02], Nautical sports [G01.01], Non-motorized nautical sports [G01.01.02], Reclamation of land from sea, estuary or marsh [J02.01.02], Paths, tracks, cycling tracks [D01.01], Changes in abiotic conditions [M01], Accumulation of organic material [K02.02], Biocenotic evolution, succession [K02], Industrial or commercial areas [E02],	In the context of the potential effects identified as a result the proposed development in s3.3.2, and considering the known threats and pressures of this European site; this SAC is sensitive to hydrological interactions and direct land use management. This site is 11.71km 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 regarding indirect surface water run-off via the Royal Canal and underground surface water drainage infrastructure, however there will be no change to drainage as a result of the proposed development, and the change of an area of 0.106 hafrom amenity grassland to permeable surfaces is minor and is not foreseen to significantly increase surface water run-off. Therefore, there is no potential for likely significant effect 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	No	No

Site Code	Site Name	Distance [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
				Discharges [E03]	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.		
004006	North Bull Island SPA	12.83	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)*	Mowing or cutting of grassland [A03], Abandonment or lack of mowing [A03.03], Fertilisation [A08], Forest planting on open ground (native trees) [B01.01], Leisure fishing [F02.03], Grazing [A04], Non intensive horse grazing [A04.02.03], Artificial planting on open ground (non-native trees) [B01.02], Non intensive cattle grazing [A04.02.01], Non intensive sheep grazing [A04.02.02], Human induced changes in hydraulic conditions [J02], Roads, paths and railroads [D01], Invasive non-native species [I01], Discontinuous urbanisation [E01.02], Forestry clearance [B02.02], Peat extraction [C01.03], Diffuse groundwater pollution due	In the context of the potential effects identified as a result the proposed development in s3.3.2, and considering the known threats and pressures of this European site; the species of this SPA are highly sensitive to habitat disturbance, direct land use management, changes in siltation loads, pollutants, water levels and anthropogenic disturbance. This site is 12.83km 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 SPA. There is a potential source regarding indirect surface water run-off and underground surface water drainage infrastructure, however there will be no change to drainage as a result of the proposed development, and the change of an area of 0.106 hafrom amenity grassland to permeable surfaces is minor and is not foreseen to significantly increase surface water run-off. Therefore, there is no potential for likely significant effect in this regard. SCI species are sensitive to noise disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such	No	No

Site Code	Site Name	Distance [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			[A130], Knot *(Calidris canutus)* [A143], Light-bellied Brent Goose *(Branta bernicla hrota)* [A674], Wetland and Waterbirds [A999]	to non-sewered population [H02.07], Forest replanting (non-native trees) [B02.01.02], Car parcs and parking areas [D01.03], Diffuse pollution to surface waters due to household sewage and waste waters [H01.08], Diffuse pollution to surface waters due to agricultural and forestry activities [H01.05]	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. An area of 0.106 ha of amenity grassland will be permanently lost as a result of the proposed development. However, given the minor area of amenity grassland that will be lost in the context of the entire Laurel Lodge Green 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.		
000206	North Dublin Bay SAC	12.84	Mudflats and sandflats not covered by seawater at low tide [1140], Petalwort *(Petalophyllum ralfsii)* [1395], Humid dune slacks [2190], Mediterranean salt meadows *(Juncetalia maritimi)* [1410], Shifting dunes along the shoreline with	Fertilisation [A08], Grazing [A04], Dispersed habitation [E01.03], Continuous urbanisation [E01.01], Modifying structures of inland water courses [J02.05.02], Removal of hedges and copses or scrub [A10.01], Roads, motorways [D01.02],	In the context of the potential effects identified as a result the proposed development in s3.3.2, and considering the known threats and pressures of this European site; this SAC is sensitive to land use management and hydrological and groundwater interactions. This site is 12.84km 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	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.

[17] 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 [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			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]	Sylviculture, forestry [B]	proposed development and the SAC. There is a potential source regarding indirect surface water run-off via the Royal Canal and underground surface water drainage infrastructure, however there will be no change to drainage as a result of the proposed development, and the change of an area of 0.106 hafrom amenity grassland to permeable surfaces is minor and is not foreseen to significantly increase surface water run-off. Therefore, there is no potential for likely significant effect 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. 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.		
001209	Glenasmole Valley SAC	13.52	Molinia meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)* [6410], Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* * important orchid sites [6210], Petrifying springs with tufa formation	Shipping lanes [D03.02], Bridge, viaduct [D01.05], Golf course [G02.01], Roads, motorways [D01.02], Continuous urbanisation [E01.01], Other patterns of habitation [E01.04], Industrial or commercial areas [E02], Nautical sports [G01.01], Interpretative centres [G03], Bait digging	In the context of the potential effects identified as a result the proposed development in s3.3.2, and considering the known threats and pressures of this European site; this SAC is sensitive to direct land use management activities, groundwater and hydrological interactions. This site is 13.52km 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 or indirect hydrological pathways between the proposed development and the SAC. Therefore, there is no potential for likely significant	No	No

Site Code	Site Name	Distance [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			(Cratoneurion) [7220]	or collection [F02.03.01], Discharges [E03], Walking, horse-riding and non-motorised vehicles [G01.02]	effect 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. 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.		
000205	Malahide Estuary SAC	14.55	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]	Bait digging or collection [F02.03.01], Walking, horse-riding and non-motorised vehicles [G01.02], Leisure fishing [F02.03], Nautical sports [G01.01], Urbanised areas, human habitation [E01], Industrial or commercial areas [E02], Roads, motorways [D01.02], Reclamation of land from sea, estuary or marsh [J02.01.02], Eutrophication (natural) [K02.03], Discharges [E03]	In the context of the potential effects identified as a result the proposed development in s3.3.2, and considering the known threats and pressures of this European site; this SAC is sensitive to direct land use management activities, hydrological and groundwater interactions. This site is 7.93km 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 regarding indirect surface water run-off and underground surface water drainage infrastructure, however there will be no change to drainage as a result of the proposed development, and the change of an area of 0.106 hafrom amenity grassland to permeable surfaces is minor and is not foreseen to significantly increase surface water run-off. Therefore, there is no potential for likely significant effect in this regard. Regarding groundwater interactions; the proposed development	No	No

Site Code	Site Name	Distance [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
					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 and the distances involved; there are no potential sources for likely significant effects, and no further assessment is required.		
004025	Malahide Estuary SPA	14.59	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],	Railway lines, TGV [D01.04], Invasive non-native species [I01], Urbanised areas, human habitation [E01], Bridge, viaduct [D01.05], Fertilisation [A08], Paths, tracks, cycling tracks [D01.01], Nautical sports [G01.01], Reclamation of land from sea, estuary or marsh [J02.01.02], Industrial or commercial areas [E02], Walking, horse-riding and non-motorised vehicles [G01.02]	In the context of the potential effects identified as a result the proposed development in s3.3.2, and considering the known threats and pressures of this European site; this SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities. This site is 14.59km 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 SPA. There is a potential source regarding indirect surface water run-off and underground surface water drainage infrastructure, however there will be no change to drainage as a result of the proposed development, and the change of an area of 0.106 hafrom amenity grassland to permeable surfaces is minor and is not foreseen to significantly increase surface water run-off. Therefore, there is no potential for likely significant effect in this regard. SCI species are sensitive to noise disturbance effects; in general distances beyond 2km are seen to be sufficient to preclude such	No	No

Site Code	Site Name	Distance [9] (km)	Qualifying Feature	Known Threats and Pressures	Potential Effects	Potential for likely Significant Effects	Potential for likely In-Combination Effects
			Wetland and Waterbirds [A999], Shelduck *(Tadorna tadorna)* [A048], Red-breasted Merganser *(Mergus serrator)* [A069]		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. An area of 0.106 ha of amenity grassland will be permanently lost as a result of the proposed development. However, given the minor area of amenity grassland that will be lost in the context of the entire Laurel Lodge Green 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.		

[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.

[21] 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 200m 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 used[22]. A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years[23].

[22] 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

There are number of other proposed developments in the vicinity 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 industrial structures. Table 3.3 provides a list of the relevant 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 Table 3.3 Local planning applications[24] relevant to the proposed development[25]

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
FW20A/0165	Grant Permission	The proposed development comprises (i) demolition of the existing detached two-storey dwelling known as Crannach at Granard Bridge, Castleknock, Dublin 15. (ii) construction of 1 no. detached two storey three-bedroom dwelling (House Type C) with 1 no. rooflight, south -facing first floor level terrace, front garden, on-curtilage vehicular parking and rear gardens of area - 273sqm; (iii) construction of 2 no. detached two-storey four-bedroom dwellings (House Type D) each with 1 no. rooflight, south-facing first floor level terrace, front garden, on -curtilage vehicular parking and rear gardens of area - 230 sq.m/ 517sq.m; (iv) relocation of the turning bay and alteration of the access road previously approved under Reg. Ref FW16A/0068; and (iv) all ancillary works inclusive of landscaping, engineering, drainage and boundary works, necessary to facilitate the development. The development is to be served by the public open space approved under Reg. Ref FW16A/0068. AI received 08/06/21	2021-08-11	2832.74		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
FW18A/0025	Grant Permission	Full planning permission for 1) demolition of single-storey extension to the side of existing	2018-05-16	614.08		Permission	This is a small-scale project with a temporary	No	No

[24] The majority of surrounding developments are minor projects with no risk of in-combination effects. Therefore, a summary list of provided here of the 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
		building, 2) the construction of a part single-storey, part two-storey, detached, four-bedroom dwelling in the side garden area to include off street parking for the new house and a new vehicular access driveway for the existing house, ancillary site works and services connections.					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.		

Conclusion

This stage one screening for AA of the proposed Laurel Lodge Park Playground, Castleknock, 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 development 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 sites[26]

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, D01.05, F03.01, E01, J02.01.02, X, I01, G02.01, D01.02, G01.03, G01.02, G01.01	Fertilisation, bridge, viaduct, hunting, urbanised areas, human habitation, reclamation of land from sea, estuary or marsh, invasive non-native species, golf course, roads, motorways, motorised vehicles, walking, horse-riding and non-motorised vehicles, nautical sports
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, F02.03.01, E03, F02.03, I01, H01.03, J01.01, E02, G02.01, G05.05, G01.01, G01.02, H01.09, E01, K03.06	Grazing, bait digging or collection, discharges, leisure fishing, invasive non-native species, other point source pollution to surface water, burning down, industrial or commercial areas, golf course, intensive maintenance of public parcs or cleaning of beaches, nautical sports, walking, horse-riding and non-motorised vehicles, diffuse pollution to surface waters due to other sources not listed, urbanised areas, human habitation, antagonism with domestic animals
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]	E01, F02.03.01, G01.02, H03, D01.02, G01.01, G01.01.02, J02.01.02, D01.01, M01, K02.02, K02, E02, E03	Urbanised areas, human habitation, bait digging or collection, walking, horse-riding and non-motorised vehicles, marine water pollution, roads, motorways, nautical sports, non-motorized nautical sports, reclamation of land from sea, estuary or marsh, paths, tracks, cycling tracks, changes in abiotic conditions, accumulation of organic material, biocenotic evolution, succession, industrial or commercial areas, discharges
001209	Glenasmole Valley SAC	Molinia meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)* [6410], Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* * important orchid sites [6210], Petrifying springs with tufa formation *(Cratoneurion)* [7220]	A03, A03.03, A08, B01.01, F02.03, A04, A04.02.03, B01.02, A04.02.01, A04.02.02, J02, D01, I01, E01.02, B02.02, C01.03, H02.07, B02.01.02,	Mowing or cutting of grassland, abandonment or lack of mowing , fertilisation, forest planting on open ground (native trees), leisure fishing, grazing, non intensive horse grazing, artificial planting on open ground (non-native trees), non intensive cattle grazing, non intensive sheep grazing, human induced changes in hydraulic conditions, roads, paths and railroads, invasive non-native species, discontinuous urbanisation, forestry clearance, peat

[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
			D01.03, H01.08, H01.05	extraction, diffuse groundwater pollution due to non-sewered population, forest replanting (non-native trees), car parcs and parking areas, diffuse pollution to surface waters due to household sewage and waste waters, diffuse pollution to surface waters due to agricultural and forestry activities
001398	Rye Water Valley/Carto n SAC	Narrow-mouthed whorl snail *(Vertigo angustior)* [1014], Petrifying springs with tufa formation *(Cratoneurion)* [7220], Desmoulin`s whorl snail *(Vertigo moulinsiana)* [1016]	A08, A04, E01.03, E01.01, J02.05.02, A10.01, D01.02, B	Fertilisation, grazing, dispersed habitation, continuous urbanisation, modifying structures of inland water courses, removal of hedges and copses or scrub, roads, motorways, sylviculture, forestry
004006	North Bull Island SPA	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], 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], Bar-tailed Godwit *(Limosa lapponica)* [A157], Dunlin *(Calidris alpina)* [A149], Golden Plover *(Pluvialis apricaria)* [A140], Grey Plover *(Pluvialis squatarola)* [A141]	D03.02, D01.05, G02.01, D01.02, E01.01, E01.04, E02, G01.01, G03, F02.03.01, E03, G01.02	Shipping lanes, bridge, viaduct, golf course, roads, motorways, continuous urbanisation, other patterns of habitation, industrial or commercial areas, nautical sports, interpretative centres, bait digging or collection, discharges, walking, horse-riding and non-motorised vehicles
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]	F02.03.01, G01.02, F02.03, G01.01, E01, E02, D01.02, J02.01.02, K02.03, E03	Bait digging or collection, walking, horse-riding and non-motorised vehicles, leisure fishing, nautical sports, urbanised areas, human habitation, industrial or commercial areas, roads, motorways, reclamation of land from sea, estuary or marsh, eutrophication (natural), discharges
004025	Broadmeado w/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*	D01.04, I01, E01, D01.05, A08, D01.01, G01.01, J02.01.02, E02, G01.02	Railway lines, tgv, invasive non-native species, urbanised areas, human habitation, bridge, viaduct, fertilisation, paths, tracks, cycling tracks, nautical sports, reclamation of land from sea, estuary or marsh, industrial or commercial areas, walking, horse-

Site Code	Site Name	Qualifying Feature	Pressure Codes	Known Threats and Pressures
		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]		riding and non-motorised vehicles

Appendix II Qualifying Interests of SACs that have undergone assessment[27]

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 macro- and 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 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)	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
[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 non-native 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 meadows *(Juncetalia maritimi)*	Most of the pressures on Mediterranean salt meadows are associated with agriculture, including overgrazing, under-grazing and land reclamation.	A09, A10, A33, A36	Intensive grazing or overgrazing by 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	Marine and groundwater dependent. 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,	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
				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)	
[2120]	Shifting dunes along the shoreline with white dunes *(Ammophila arenaria)*	Most of the pressures on marram dunes are caused by the interference on sediment dynamics due to recreation and coastal defences.	E01, E03, F01, F06, F07, F08, I02, L01	Roads, paths, railroads and related infrastructure (e.g., bridges, viaducts, tunnels), 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), other invasive alien species (other than species of union concern), abiotic natural processes (e.g., erosion, silting up, drying out, submersion, salinization)	Overgrazing, and erosion. Changes in management.
[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 species composition change (other than by direct changes of agricultural or forestry practices)	Overgrazing, and erosion. Changes in management.
[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	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.

EU Code	Qualifying Interests	Article 17 Report Summary - Threats and Pressures	Threats and Pressures Codes	Known Threats and Pressures	Sensitivity of Qualifying Interests
		drainage. Succession to scrub is also a problem, particularly where it is linked to desiccation of the slack.			
[6210]	Semi-natural dry grasslands and scrubland facies on calcareous substrates *(Festuco-Brometalia)* * important orchid sites)	The significant pressures related to this habitat are mainly associated with agricultural intensification causing loss of species-rich communities, or abandonment of farmland resulting in succession to scrub.	A02, A09, A10, C01, I02, I04	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, extraction of minerals (e.g., rock, metal ores, gravel, sand, shell), other invasive alien species (other than species of union concern), problematic native species	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
[6410]	Molinia meadows on calcareous, peaty or clayey-silt-laden soils *(Molinion caeruleae)*	The main pressures on the habitat are associated with agricultural intensification (e.g., land drainage, fertiliser application), under-grazing and forestry.	A02, A06, A10, A14, A31, B01	Conversion from one type of agricultural land use to another (excluding drainage and burning), abandonment of grassland management (e.g., cessation of grazing or of mowing), extensive grazing or under grazing by livestock, livestock farming (without grazing), drainage for use as agricultural land, conversion to forest from other land uses, or afforestation (excluding drainage)	Changes in management such as grazing regime. Changes in nutrient or base status. Changes to vegetation composition. Introduction of alien species.
[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[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 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

[28] Including known treats and pressures of SCIs

Species Code	Common Name	Scientific Name	Threats and Pressures Codes	Known Threats and Pressures
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 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 non-native species, changes in abiotic conditions

Appendix IV Conservation Objectives[29]

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 Glenasmole Valley SAC [IE0001209] 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] 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.