

# Sarsfield Park Planning Derogation

**Final**

**November 2023**

**Prepared for:  
South Dublin County Council**



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This report describes work commissioned by Anna Rosinska, on behalf of South Dublin County Council by an instruction dated 19<sup>th</sup> September 2023. The Client's representative for the contract was Anna Rosinska of South Dublin County Council. Mia Heigh and Michael Coyle of JBA Consulting carried out this work.

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## Abbreviations

AA.....	Appropriate Assessment
CJEU.....	Court of Justice of the European Union
CIEEM.....	Chartered Institute of Ecology and Environmental Management
DoEHLG.....	Department of Environment, Heritage and Local Government
EC.....	European Communities
EPA.....	Environmental Protection Agency
EU.....	European Union
GSI.....	Geological Survey Ireland
IAQM.....	Institute of Air Quality Management
INNS.....	Invasive Non-native Species
IROPI.....	Imperative Reasons of Over-riding Public Interest
NOx.....	Nitrogen Oxides
NBDC.....	National Biodiversity Data Centre
NPWS.....	National Parks and Wildlife Service
OPR.....	Office of the Planning Regulator
QI.....	Qualifying Interest
RBMP.....	River Basin Management Plan
SAC.....	Special Area of Conservation
SDCC.....	South Dublin County Council
SuDS.....	Sustainable Drainage Systems
SPA.....	Special Protection Area
WFD.....	Water Framework Directive
ZoI.....	Zone of Influence



# 1 Introduction

## 1.1 Background

JBA Consulting Engineers and Scientists Ltd. (hereafter JBA) has been commissioned by South Dublin County Council (SDCC) to prepare an Appropriate Assessment Screening Report for the proposed project for Planning Derogation purposes of Sarsfield Park in Lucan, Co. Dublin.

Screening for appropriate assessment is intended to be an initial examination which must be carried out by the Planning Authority or An Bord Pleanála as the competent authority. However, this screening is completed on behalf of the project proposer to show that likely significant effects have been considered in the project development and design, and where necessary progress with further assessment.

This Appropriate Assessment screening report provides the results of the screening appraisal conducted for the proposed development in order to complete the first stage of the appropriate assessment process in accordance with Article 42 of the 2011 Bird and Habitats Regulations, which implements the Habitats Directive (European Commission 1992) into Irish Law.

## 1.2 Legislative Context

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, known as the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000 sites. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79 / 409 / EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

*“Any plan or project not directly connected with or necessary to the management of the 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.”

Article 6(4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

*“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.*

*Where the site concerned hosts a priority natural habitat type and / or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”*

The requirements of Articles 6(3) and 6(4) of the Habitats Directive have been transposed into Irish legislation by means of inter alia the European Communities (Birds and Natural Habitats) Regulations 2011-2015 (S.I. No. 477 / 2011) as amended.

### 1.3 Appropriate Assessment Process

Guidance on the Appropriate Assessment (AA) process was produced by the European Commission in 2002, which was subsequently developed into guidance specifically for Ireland by the Department of Environment, Heritage and Local Government (DEHLG) (2009, rev 2010). Office of the Planning Regulator (OPR) produced a Practice Note in 2021, PN01 - Appropriate Assessment Screening for Development Management (OPR, 2021). These guidance documents identify a staged approach to conducting an AA, as shown Figure 1-1.

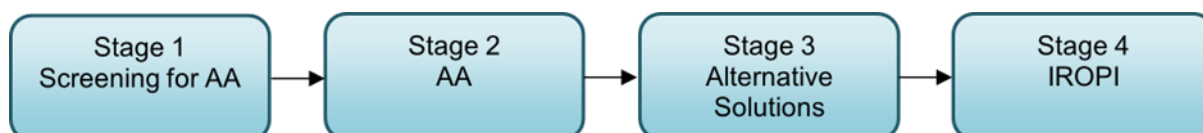


Figure 1-1 The Appropriate Assessment Process (from: Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities, DEHLG, 2009)

#### 1.3.1 Stage 1 – Screening for AA

The initial, screening stage of the Appropriate Assessment is to determine:

- whether the proposed plan or project is directly connected with or necessary for the management of the European designated site for nature conservation
- if it is likely to have a significant adverse effect on the European designated site, either individually or in combination with other plans or projects.

For those sites where, potential adverse effects are identified, either alone or in combination with other plans or projects, further assessment is necessary to determine if the proposals will have an adverse effect on the integrity of a European designated site, in view of the site's conservation objectives (i.e. the process proceeds to Stage 2).

### 1.3.2 Stage 2 – AA

This stage requires a more in-depth evaluation of the plan or project, and the potential direct and indirect effects of them on the integrity and interest features of the European designated site(s), alone and in-combination with other plans and projects, taking into account the site's structure, function and conservation objectives. Where required, mitigation or avoidance measures will be suggested.

The competent authority can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site(s) concerned. If this cannot be determined, and where mitigation cannot be achieved, then alternative solutions will need to be considered (i.e. the process proceeds to Stage 3).

### 1.3.3 Stage 3 – Alternative Solutions

Where adverse effects on the integrity of Natura 2000 sites are identified, and mitigation cannot be satisfactorily implemented, alternative ways of achieving the objectives of the plan or project that avoid adverse effects need to be considered. If none can be found, the process proceeds to Stage 4.

### 1.3.4 Stage 4 – IROPI

Where adverse effects of a plan or project on the integrity of Natura 2000 sites are identified and no alternative solutions exist, the plan will only be allowed to progress if imperative reasons of overriding public interest can be demonstrated. In this case compensatory measures will be required.

The process only proceeds through each of the four stages for certain plans or projects. For example, for a plan or project, not connected with management of a site, but where no likely significant effects are identified, the process stops at stage 1. Throughout the process, the precautionary principle must be applied, so that any uncertainties do not result in adverse effects on a site.

This report is in support of a Stage 1 Screening for Appropriate Assessment.

### 1.3.5 Recent judgements of the Court of Justice of the European Union (CJEU) and how they are used in this assessment.

The CJEU issued a ruling on the consideration of avoidance and reduction measures as a result of the case known as People over Wind, Peter Sweetman v Coillte Teoranta (Case C-323/17). This judgement stated that measures intended to reduce or avoid effects on a Natura 2000 site should only be considered within the framework of an Appropriate Assessment, and it is not permissible to take into account such measures at the screening stage. In practice, this means that any activities that are not integral to the project (i.e., the project could conceivably take place without them) and have the effect of avoiding or reducing an effect on a Natura 2000 site, cannot be considered at the screening stage.

The CJEU ruling in the case of Grace & Sweetman [2018] (C-164/17) clarified the difference between avoidance and reduction (mitigation) measures and compensation. Measures intended to compensate for the negative effects of a project cannot be taken into account in the assessment of the implications of a project, and instead are considered under Article 6(4). This means that any project where an effect on the integrity of a Natura 2000 site remains and can only be offset by compensation, would need to proceed under Article 6(4), demonstrating “imperative reasons of overriding public interest”.

The judgements referred to as the Dutch Nitrogen cases [2018] (C-293/17 and C-294/17) have important implications for projects that could potentially affect on sites that are exceeding critical thresholds for input of damaging ammonia (but could also reasonably apply where other nutrients are affecting Natura 2000 sites). The judgements state that the use of thresholds to exclude project effects is acceptable in principle, and that strategic plans can be used as mitigation but only with consideration of the certainty (or otherwise) of the outcomes of those strategic plans. It clarifies that where the status of a habitat type is already unfavourable the possibility of authorising activities which increase the problem is necessarily limited.

The CJEU ruling in the case of Holohan v An Bord Pleanala (C-462/17) also clarified the importance in Appropriate Assessment of taking into account habitat types and species outside the boundary of the Natura 2000 site where implications of the effects on those habitat and species may affect the conservation objectives of the Natura 2000 site. In this assessment functionally linked and supporting habitat for species outside of Natura 2000 sites are assessed where they could potentially affect the conservation objectives of any screened in Natura 2000 sites.

The CJEU ruling in response to questions referred by the Irish High Court in the Eco Advocacy case (C-721/21) indicated that an applicant for permission in its AA screening report/and a decision maker in undertaking its AA screening can take into account “standard features”, i.e. all the constituent elements of that project inherent in it/elements that are incorporated into a projects design not with the aim of reducing its

negative effects (even where these have the effect of reducing harmful effects on a European site).

## 1.4 Methodology

The Screening for Appropriate Assessment has been prepared with regards to the Birds and Habitats Directives, the European Communities (Birds and Natural Habitats) Regulations 2011-15 as amended and relevant jurisprudence of the EU and Irish courts. The following documents have also been used to provide guidance for the assessment:

- DEHLG (2009 rev 2010) Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government (DEHLG, 2009).
- Office of the Planning Regulator (2021) OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management (OPR, 2021).
- European Communities (EC) (2019) Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission (European Commission 2019)
- EC (2002) Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg. European Commission (European Commission et al., 2002).
- EC (2022) Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission, 2022).
- EC (2013) Interpretation manual of European Union habitats. Version EUR 28. (EC 2013).
- EC (2007) Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. European Commission Management (European Commission, 2007).

### 1.4.1 Desktop Study

A desktop study was conducted of available published and unpublished information, along with a review of data available on the National Parks and Wildlife Service (NPWS) and National Biodiversity Data Centre (NBDC) web-based databases, to identify key habitats and species, including legally protected and species of conservation concern, that may be present within ecologically relevant distances from the project as explained below. A baseline habitat assessment was performed using

satellite imagery of the site. The data sources below were consulted for the desktop study:

- Aerial photography available from [www.osi.ie](http://www.osi.ie) and Esri World Imagery.
- NPWS website ([www.npws.ie](http://www.npws.ie)) where Natura 2000 site synopses, data forms and conservation objectives were obtained along with Annex 1 habitat distribution data and status reports.
- River Basin Management Plans
- NBDC Biodiversity Maps ([maps.biodiversityireland.ie](http://maps.biodiversityireland.ie))
- Catchments ([www.catchments.ie](http://www.catchments.ie))
- Environmental Protection Agency Maps (<https://gis.epa.ie/EPAMaps>)
- Geological Survey Ireland (GSI) ([www.gsi.ie](http://www.gsi.ie))
- GSI - Groundwater data viewer (<https://dcenr.maps.arcgis.com>)
- Planning Applications ([myplan.ie](http://myplan.ie))

#### 1.4.2 Site Survey

In the absence of an ecological site survey, aerial imagery was used for a preliminary habitat composition assessment on the site to be developed. Habitats were classified according to the national habitat classification system of Fossitt (2000).

### 1.5 Screening Method

This screening assessment uses the source-pathway-receptor model as outlined in guidance (OPR 2021). Using the source-pathway-receptor model allows for the potential significant effects to be eliminated if no viable source, pathway, or receptor is present.

An examination of the construction methods or project description allows sources of effect to be determined. This also allows a zone of influence for the project to be generated based on the size, scale and nature of the works involved. The pathways for effect are also analysed to see if a functional pathway for effect is present. This report analyses three pathways: surface water, groundwater and land. Using information gathered from desk sources (e.g. mapped qualifying interests from the Conservation Objectives for the site) and from field surveys, receptors within the zone of influence are identified. In some cases, sensitive receptors may also play a role in determining the zone of influence. If any of the three parts to the model are not present (source-pathway-receptor) the potential for a likely significant effect from the project on the Natura 2000 network can be discounted.

#### 1.5.1 Zone of Influence (Zol)

The Zone of Influence (Zol) for the project is based on a professional judgement of the likely extent of the ecological impacts. This will vary for different ecological features, depending on their sensitivities to environmental change.

This means the final 'Zone of Influence' can be a complex shape not easily defined by a simple distance figure, but in this way the assessment includes all relevant sites whilst avoiding unnecessary inclusion of other sites.

### 1.5.2 Likely Significant Effect Test

The test for AA screening is whether the project could have a 'Likely Significant Effect' (LSE) on any Natura 2000 site. A likely significant effect is defined as any effect that could undermine the conservation objectives of a Natura 2000 site, either alone or in combination with other plans or projects. There must be a causal connection between the project and the qualifying interest of the site which could result in possible significant effects on the site. The LSE test is a lower threshold for the screening assessment than 'adverse effect on site integrity' considered at Appropriate Assessment stage (Stage 2) as screening is intended to be a preliminary examination for potential effects.

The Zone of Influence was used to identify Natura 2000 sites that could be affected by the project. For each of these sites, the Qualifying Interest features and their associated conservation objectives were identified, and the possibility of LSE was determined by a combination of location, ecological and hydrological connectivity, sensitivity of receptor and magnitude of the source of effect.

### 1.5.3 In-Combination Screening

The possibility of in-combination effects are considered only at a high level. Where there is no effect at all via a pathway, there is no possibility of in-combination effects. Where an LSE is identified, the in-combination assessment is carried forwards to a Stage 2 Appropriate Assessment.

## 1.6 Limitations and Constraints

The screening assessment necessarily relies on some assumptions, and it was inevitably subject to some limitations. These would not affect the conclusion, but the following points are recorded to ensure the basis of the assessment is clear:

- This assessment is based on a desktop study, with adequate information available for the assessment.
- This assessment is based on the methodology for proposed works as described in this report. Where changes to methodology occur, an ecologist will need to be consulted to determine if the changes are likely to alter the ecological effects and would therefore need reassessment.

- Data from biological record centres or online databases is historical information, and datasets may be incomplete, inaccurate, or missing. The absence of records for an area may be due to the under recording in the area and not necessarily imply the absence of species. These records are therefore to be treated as minimum information available for the area.



## 2 Project Description

### 2.1 The 'Project'

The Proposed Project, known as 'Sarsfield Park', is not directly connected with, or necessary to the management of any Natura 2000 site and may have potential adverse effects upon the Natura 2000 sites identified in Section 4. Therefore, the proposed project is subject to the requirements of the AA process.

### 2.2 Site Location

The proposed site is located in Sarsfield Park, Lucan, Co. Dublin, approximately 270m east of Lucan's main street and approximately 775m north of the N4. The Griffeen River, which is a tributary of the WFD Waterbody Liffey\_170, is located to the west of the site boundary, with the River Liffey to the north. The location of the site is shown in Figure 2-1.

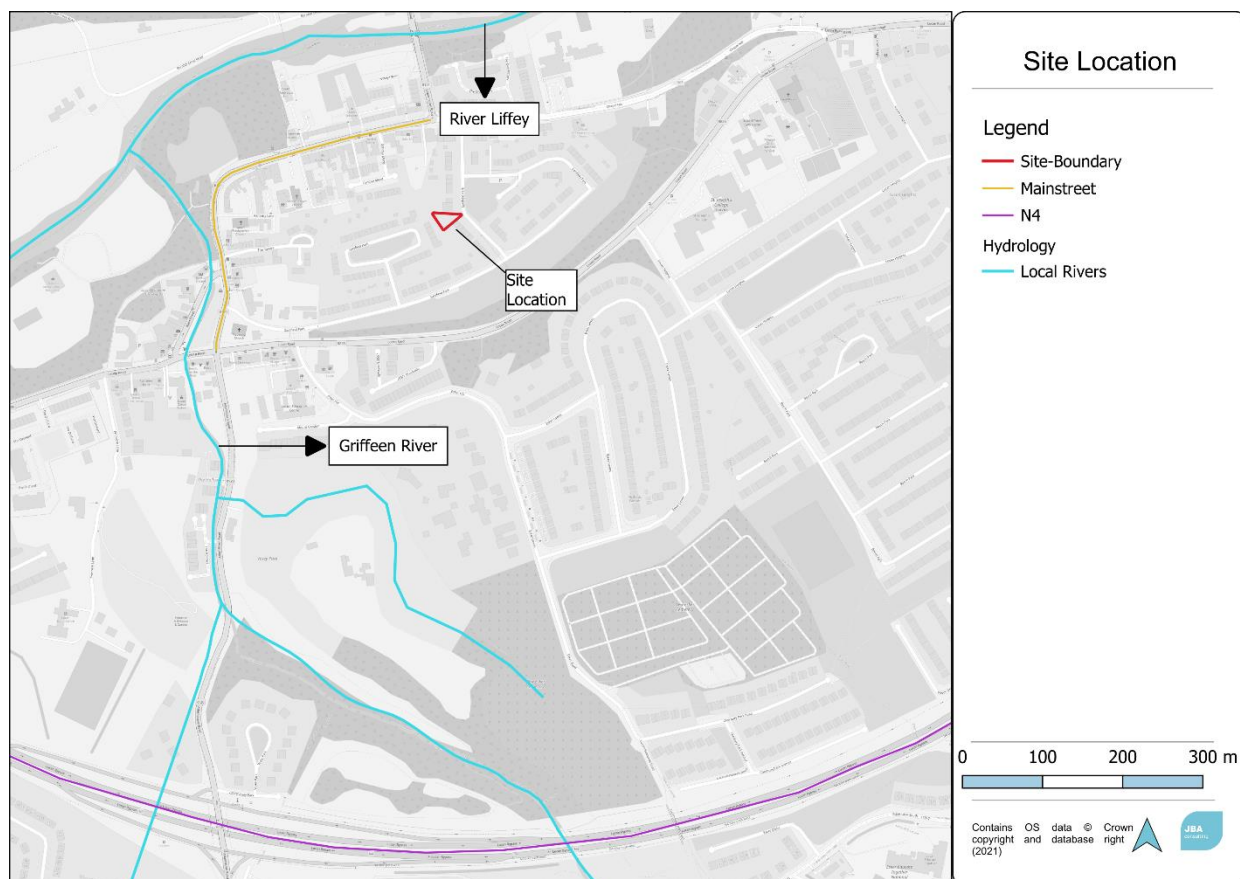


Figure 2-1 Site location and surrounding rivers.

## 2.3 Proposed Project

The project includes the establishment of a series of dwellings located in an age-friendly infill social housing within an existing residential area. The proposed dwellings are designed as infill housing and as a continuation of the existing terraced housing to the south-east. The north of the site is facing onto existing public footpath, with residential dwelling behind. The existing terraced residential units with their rear gardens are adjacent to the west of the site. The site is free of onsite services, and it is undeveloped. The development consists of:

- 4 no's of 1-bedroom apartments, housed in a 2 storey building,
- 1 no of standard 1-bedroom single storey dwelling type.

The construction period should be 10-12 months, beginning April/May 2024.

Excavations throughout the site will be mixed to accommodate a range of proposed features:

- The proposed residential site, except attenuation areas, may exceed 1.2m depending on detailed design stage
- Any attenuation areas, if required, to be max 1.8m
- Minor additional excavations may be required for a footpath

The Site Layout Plan can be view in Appendix A.

### 2.3.1 Site Drainage

#### *Construction Phase*

Surface water will be locally attenuated on site with predefined areas of attenuation placed at the beginning of the project. Construction of the development's attenuation system will be in line with best practice guidance.

These measures are in line with the Greater Dublin Regional Code of Practice for Drainage Works (Dublin City Council, 2021). The first objective of the Code of Practice is Compliance with best environmental practices and relevant environmental legislation such as the Water Framework Directive

#### *Operation Phase*

The development will facilitate sustainable drainage strategy/design (SuDS: tree pits, bioretention areas, rain gardens, permeable paving) using the available landscape spaces as well as the construction profile of the buildings to limit surface water run-off. The site is to be connected to the SDCC surface water system. All designed to SDCC Sustainable Drainage Explanatory Design & Evaluation Gude and Greater Dublin Regional Code of Practice for Drainage Works.

During operation phase the foul water drainage will be connected to the existing Dublin city combined sewers. The water will be treated at Ringsend Waste Water

Treatment Plant (WWTP), which has the capacity of 1.64 million PE, before being discharged at Poolbeg, 1km from the plant.

### 2.3.2 Zone of Influence (Zoi)

The Zone of Influence is considered using the Source-Pathway-Receptor model, therefore only designated sites that are connected to the project site are recorded and assessed. Connections are assessed for effects relating to noise disturbance (1km), air pollution (500m as per IAQM, 2023), ground water (5km) surface water (5km), with an additional hydrological buffer connecting transitional waters to coastal areas (15km); and any supporting habitat for SAC/SPA species beyond this distance that may have QI species that utilise the site.

### 3 Existing Environment

#### 3.1 Desktop Assessment of Habitats

In the absence of an ecological site survey, aerial imagery and street view was used for a preliminary habitat composition assessment on the site to be developed. The site of interest appears to be comprised of amenity grassland with 2/3 trees and a small area of scrub to the west of the site. The surrounding area comprises of primarily urban built land including private dwellings, footpaths and access roads, with some amenity grassland areas with some hedging. These were classified (Table 3-1) using Fossitt nomenclature (Fossitt, 2000). None of the presumed habitats present are part of the QIs of the nearby SACs or SPAs.

Table 3-1 Habitats within site boundary.

Fossitt Habitat	Fossitt Code
Amenity grassland (improved)	GA2
Scrub	WS1

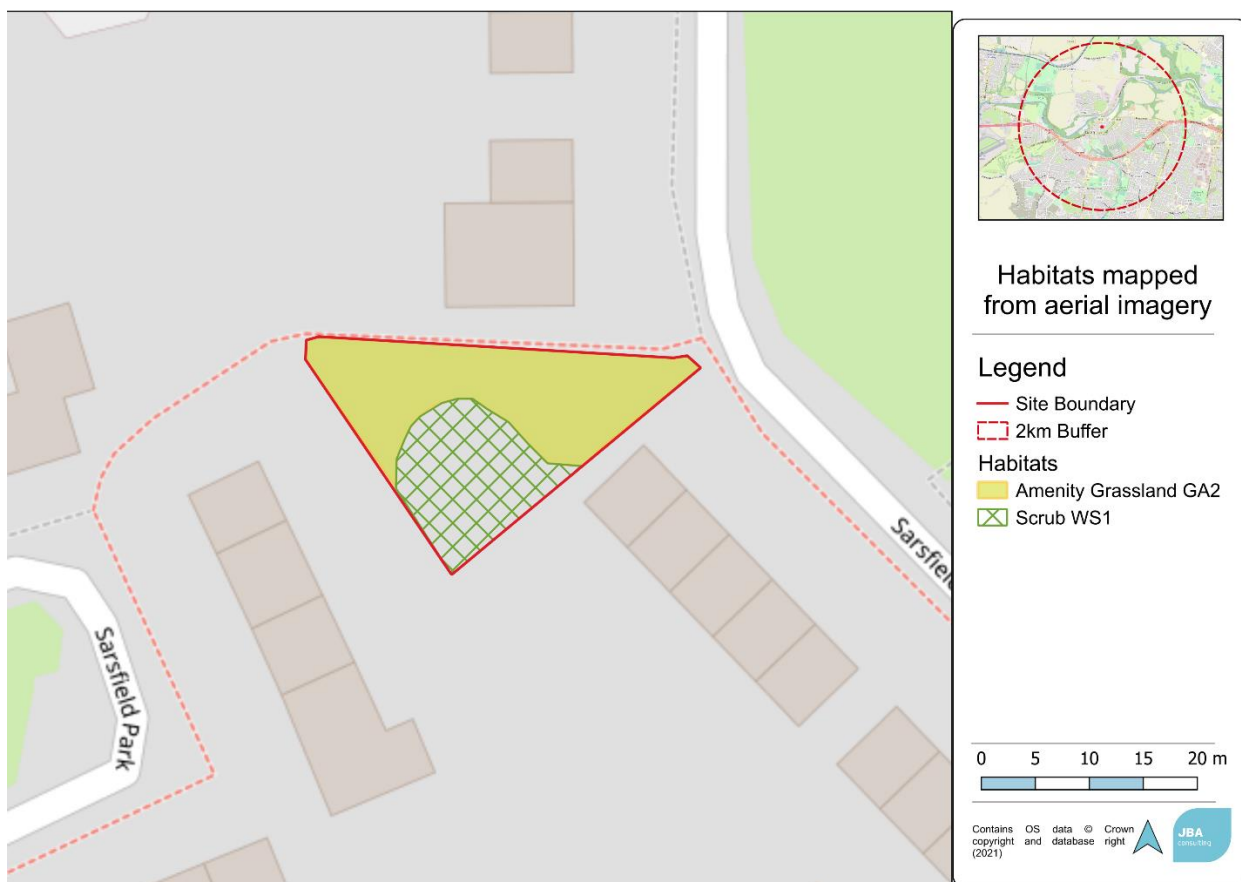


Figure 3-1 Habitats mapped using aerial imagery during desktop assessment.

### 3.1.1 Desktop assessment of habitats in the wider area.

#### Amenity grassland GA2

The site consists mainly of amenity grassland (improved), likely to be species poor based on aerial imagery used to classify the site during desktop assessment.

Amenity grassland is also present in the surround area of the site.

#### Buildings and artificial surfaces BL3

These areas consist mainly of the road networks, existing footpaths, and residential buildings.

#### Scattered trees and parkland WD5

Scattered trees, alone and in small clusters along with cultivated grassland and parkland are also present in the area surrounding the site.

#### Scrub WS1

Scrub is present at the south side of the site. Likely including Bramble *Rubus fruticosus agg.*, stunted trees, shrubs or scattered trees.

## 3.2 Protected Species

Given the small size and nature of the site location, it is highly unlikely to provide ex-situ foraging opportunities for any QI species, however, with no ecological walkover survey carried out, a custom polygon of species found within 5km of the site boundary (NBDC, 2023) was generated and the full list of species are listed in Appendix B. In summary, these records are absent of any QI species.

### 3.2.1 Flora

Of note, some threatened species were recorded within the 5km of the site boundary, including Common Gromwell *Lithospermum officinale* (Near Threatened), Fragrant Agrimony *Agrimonia procera* (Near Threatened), Greater Knapweed *Centurea Scabiosa* (Near Threatened), and Green Figwort *Scrophularia umbrosa* (Endangered).

However, none of these species are of QI for any of the Natura 2000 sites within the Zol of the project, and they will not be considered further regarding effects of the development.

### 3.2.2 Mammals

Eleven protected mammal species recorded within 5km of the site since 01/01/2013 include; Daubenton's Bat *Myotis daubentonii*, Badger *Meles meles*, Pygmy Shrew *Sorex minutus*, Red Squirrel *Sciurus vulgaris*, Otter *Lutra lutra*, Lesser Noctule *Nyctalus leisleri*, Pine Marten *Martes martes*, Pipistrelle *Pipistrellus pipistrellus sensu*

*Iato*, Red Deer *Cervus elaphus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, and Hedgehog *Erinaceus europaeus*. These species are protected under the Wildlife Act or under Annex IV/V of the E.U Habitats Directive.

However, none of these species are of QI for any of the Natura 2000 sites within the Zol of the project, and they will not be considered further regarding effects of the development.

### 3.2.3 Birds

A full list of bird species, covered by national and/or international legislation, recorded in the NBDC record query is available in Appendix B. However, none of these species are of QI for any of the Natura 2000 sites within the Zol of the project, and they will not be considered further.

## 3.3 Invasive Species

A full list of invasive species recorded in the last 10 years within a 5km perimeter of the site is listed in Appendix C.

## 3.4 Elevation and Slope

The site sits 26m above sea level, with a northwest to southeast gradient.

## 3.5 Surface Waterbodies

The site lies within the Liffey and Dublin Bay catchment (EPA, 2023). It also lies to the north of the Liffey\_SC\_090 sub catchment (Figure 3-1), 380m north of the site is the Liffey\_SC\_100 sub catchment. Two surface waterbodies are within 300m of the site (Figure 3-2), the River Liffey and River Griffeen.

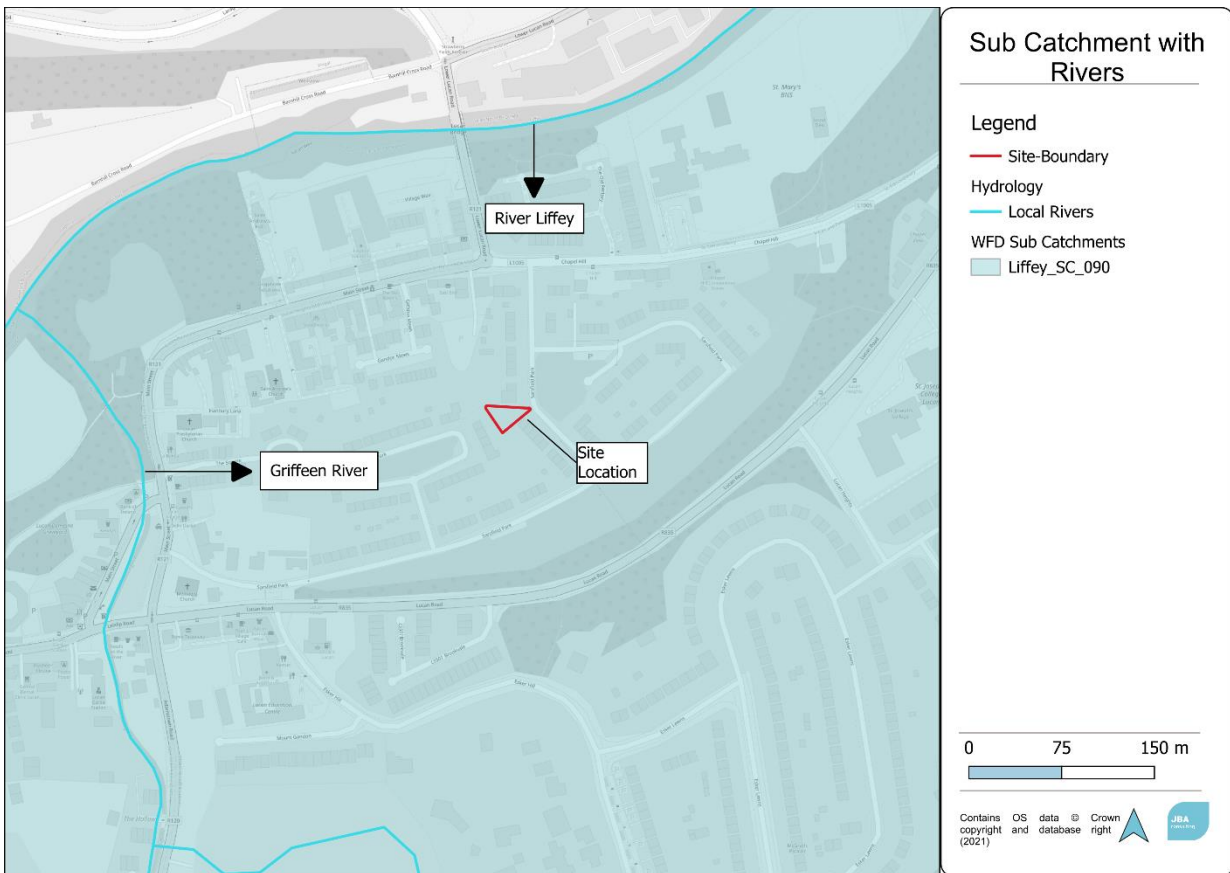


Figure 3-2 Sub catchment of the site and local rivers.

### 3.6 Groundwater Bodies

The site sits on Dark Limestone and Shale within the Lucan Formation, the sub soil permeability of the site has not been mapped but has a Locally Important Aquifer of bedrock that is classed as ‘Moderately Productive only in Local Zones’. The proposed site is located on the groundwater body Dublin IE\_EA\_G\_008, which has an overall groundwater status of ‘Good’ and is classed as ‘Not at risk’.

On site the groundwater vulnerability is described as ‘Extreme’.

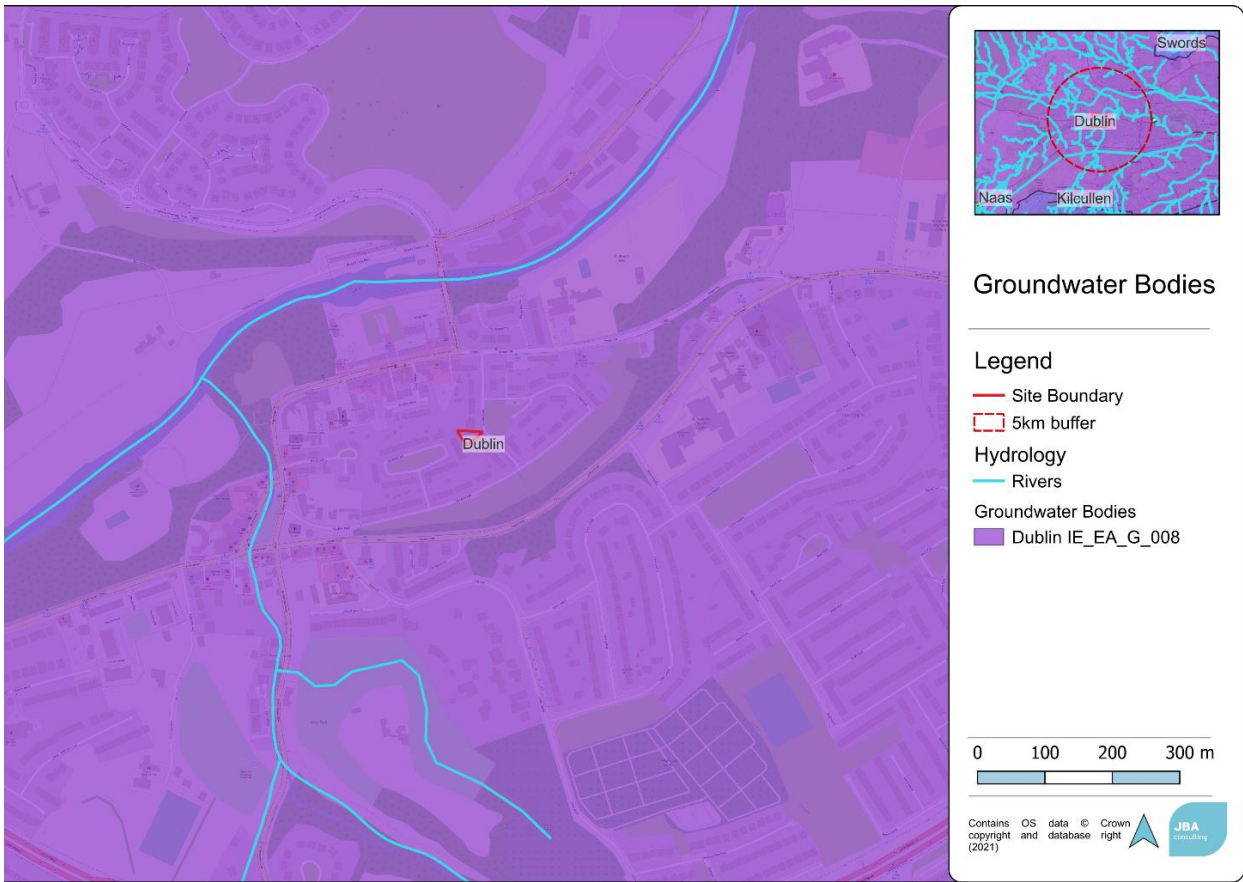


Figure 3-3 Groundwater bodies and rivers with respect to the project site.



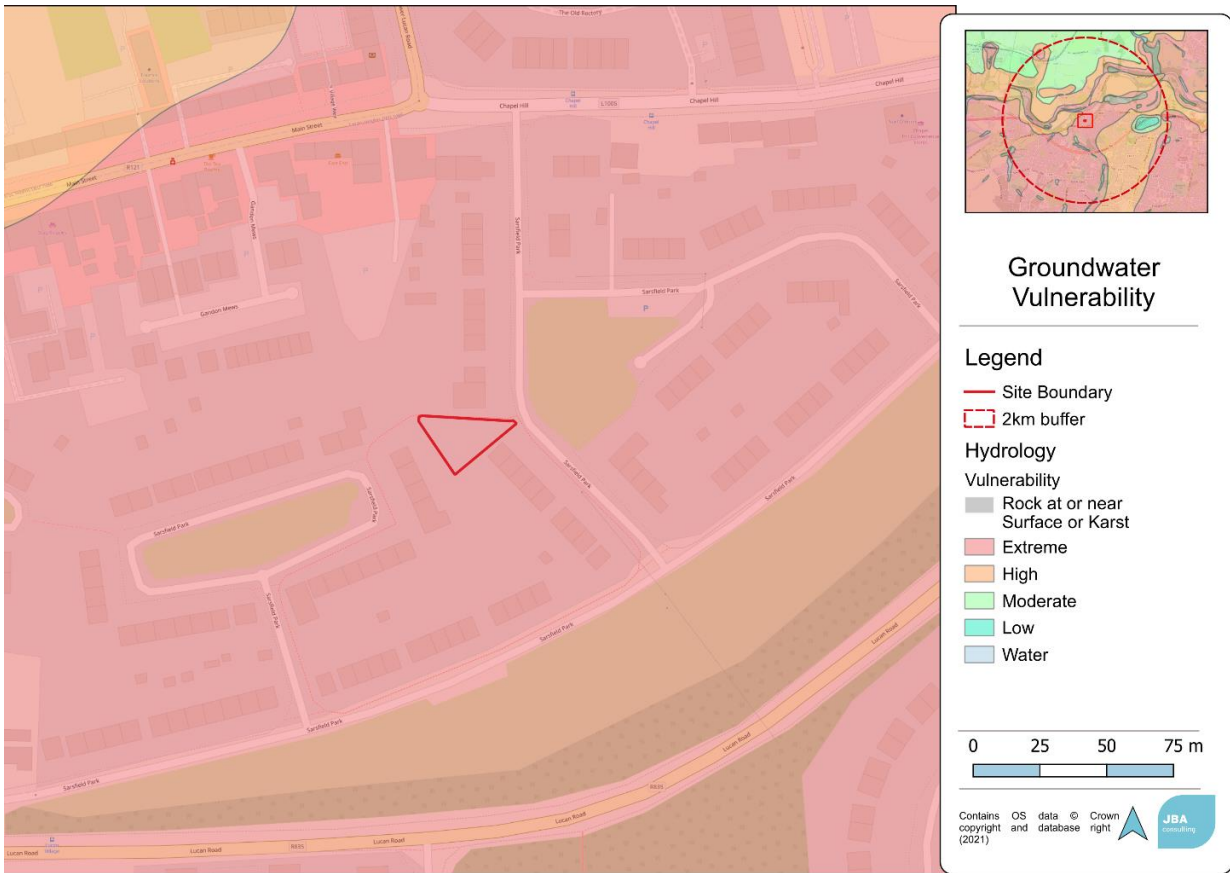


Figure 3-4 Groundwater vulnerability with respect to the project site.

## 4 Natura 2000 Sites

### 4.1 Determining likely Zone of Influence

The DEHLG (2009) guidance identifies that Screening for Appropriate Assessment of a plan or project should consider the following Natura 2000 sites:

- Any Natura 2000 sites within or adjacent to the plan or project area.
- Any Natura 2000 sites within the likely zone of effect of the plan or project. This is dependent on the nature and scale of the plan, with 15km generally recommended for plans, but potentially much less for projects.
- Any Natura 2000 sites that are more than 15km from the plan or project area, but may potentially be affected upon, for example, through a hydrological connection.

Furthermore, the OPR guidance is to use a Source-Pathway-Receptors model, therefore only directly connected sites will be retained (OPR, 2021).

Within the Zol, six Natura 2000 sites were recorded (Table 4-1). These are mapped in relation to the proposed site (Figure 4-1), with potential pathways from site. Qualifying Interests (QI), brief site descriptions, and potentially relevant threats/pressures are also described for designated sites to the development (Table 4-2).

Table 4-1 Natura 2000 sites close to the project.

Natura 2000 site	Site Code	Approximate distance from site	Hydrological Connection
Rye Water Valley/Cartron SAC	001398	2.9km	No Connection
North Dublin Bay SAC	000206	17.5km	Surface water (indirect)
South Dublin Bay SAC	000210	15.6km	Surface water (indirect)
North Bull Island SPA	004006	13.1km	Surface water (indirect)
South Dublin Bay and River Tolka Estuary SPA	004024	15.6km	Surface water (indirect)
North-West Irish Sea cSPA	004236	19.8km	Surface water (indirect)

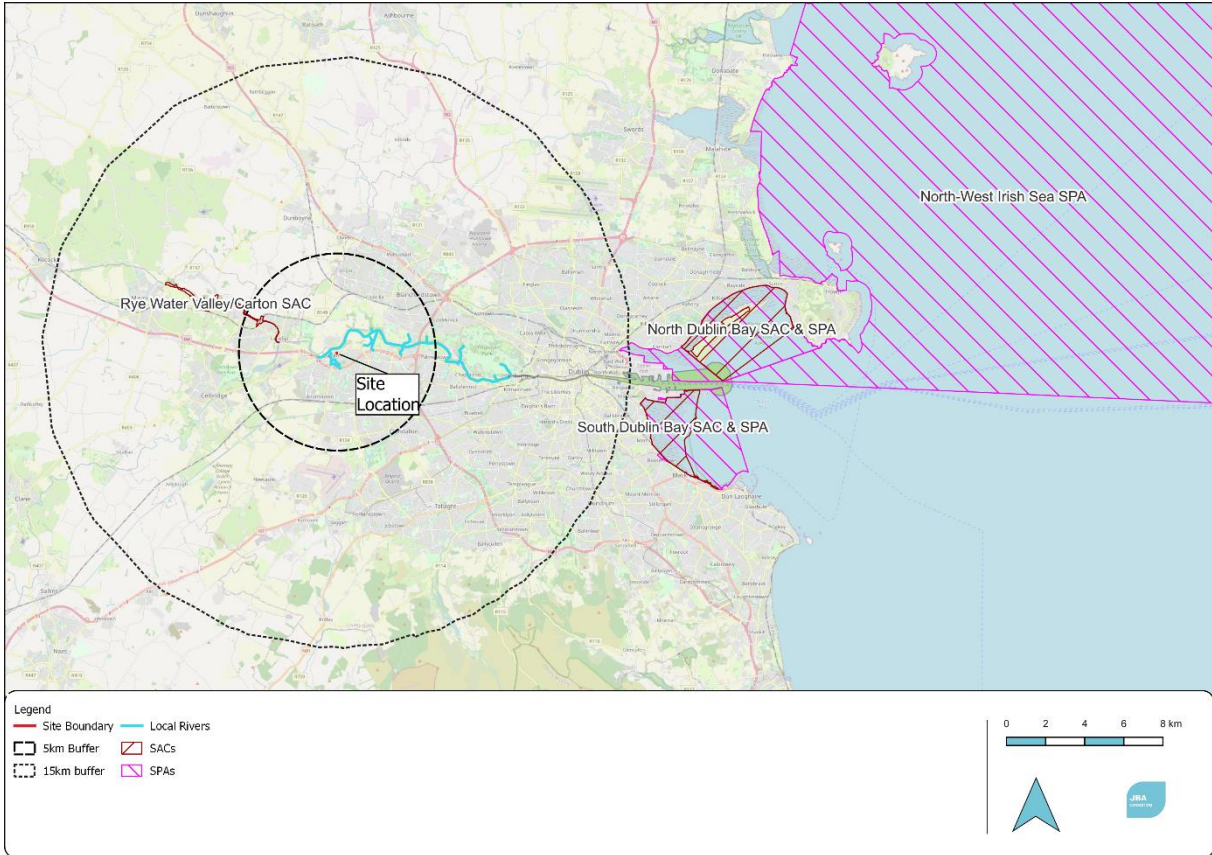


Figure 4-1 Natura 2000 sites within 5km, or with downstream connections to the proposed development site.

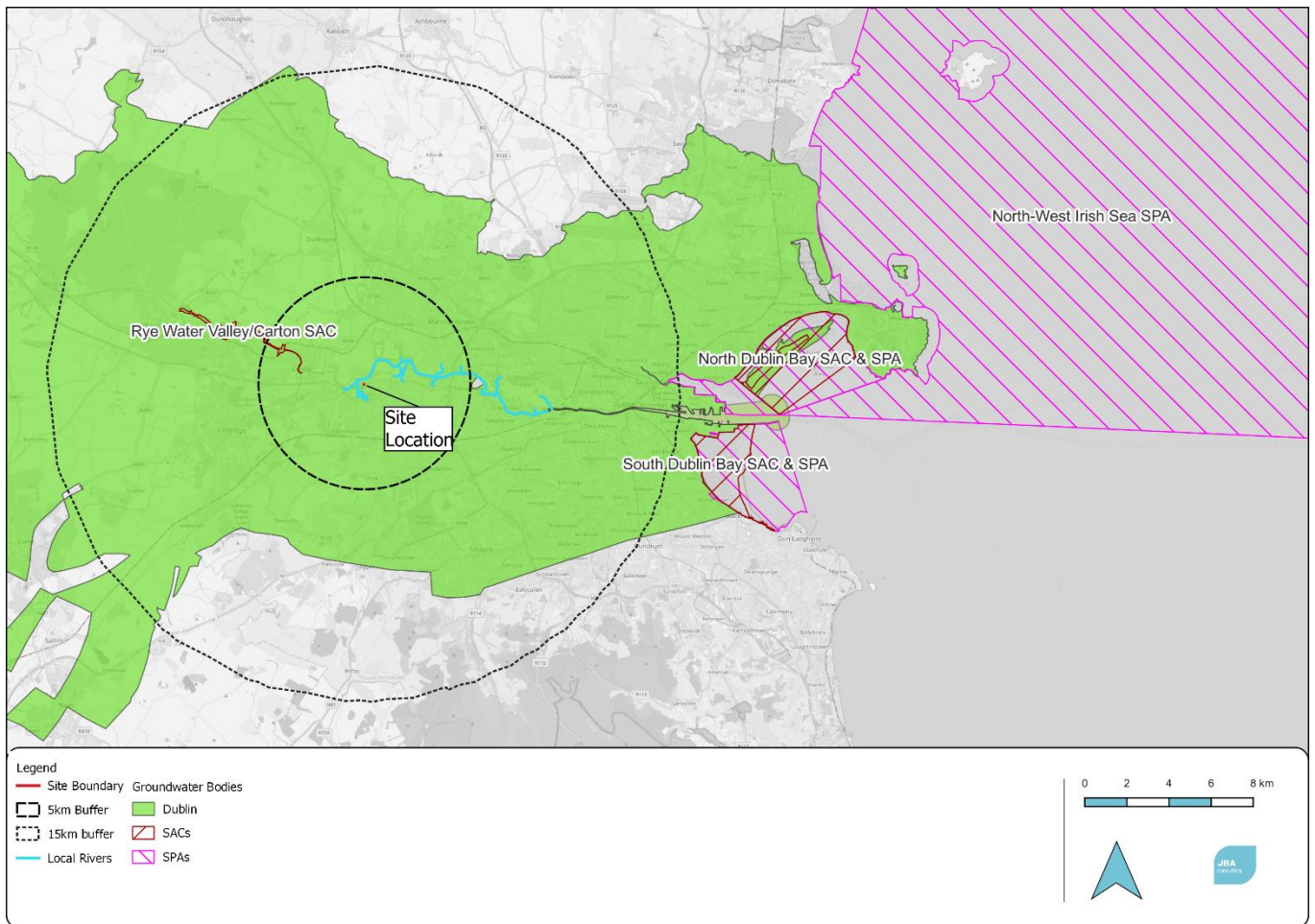


Figure 4-2 Groundwater connection to Natura 2000 sites with respect to the proposed development site.

Table 4-2 Natura 2000 sites with relevant conservation objectives.

Site Name	Brief and relevant conservation objectives	Relevant qualifying interests	Project-relevant threats/pressures: Effect (Source)
Rye Water Valley/Cartron SAC 001398	<p>The Rye Water is a tributary of the Liffey, and the SAC boundary stretches from east of Maynooth as far as Leixlip village. It flows through the Carton demesne which is wooded with specimen native and non-native trees. The river is dammed in a number of locations, and this has created a series of small lakes. The SAC covers an area of nearly 73 ha. The reasons why this area falls under the SAC designation are set out in the qualifying interests. They are either habitat types listed in Annex I or species listed in Annex II of the Habitats Directive.</p> <p>The objectives of the SAC are to restore the favourable conservation</p>	<p>Petrifying springs with tufa formation (Cratoneurion) [7220]</p> <p>Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]</p> <p>Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]</p>	<p>-Sylviculture, forestry (Moderate)(Inside)</p> <p>-Roads, motorways (Low)(Outside)</p> <p>-Fertilisation (Low)(Inside)</p> <p>-Continuous urbanisation (Moderate)(Outside)</p> <p>-Dispersed habitation (Low)(Outside)</p> <p>-Grazing (Low) (Inside &amp; Outside)</p> <p>-Modifying structures of inland water courses</p>

Site Name	Brief and relevant conservation objectives	Relevant qualifying interests	Project-relevant threats/pressures: Effect (Source)
	condition of Petrifying springs with tufa formation (Cratoneurion) and <i>Vertigo angustior</i> Narrow-mouthed Whorl Snail, and maintain the favourable conservation condition of <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail).		(Moderate)(Inside) -Removal of hedges and copses or scrub (Low)(Inside)
North Dublin Bay SAC	This SAC extends from the inner part of North Dublin Bay, and primarily focuses on North Bull Island. Dynamic dune systems and saltmarshes are found along this region. A variety of important and rare flora habituate this SAC, including Lesser Centaury, Red Hemp-nettle, and Meadow Saxifrage. North Dublin Bay is also of international importance for waterfowl as it hosts Brent Goose, Knot, Bar-tailed Godwit, Oystercatcher, Ringed Plover, Sanderling, and Dunlin (NPWS, 2013b).	<ul style="list-style-type: none"> <li>- Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>- Annual vegetation of drift lines [1210]</li> <li>- <i>Salicornia</i> and other annuals colonising mud and sand [1310]</li> <li>- Atlantic salt meadows <i>Glauco-Puccinellietalia maritimae</i> [1330]</li> <li>- Mediterranean salt meadows <i>Juncetalia maritimi</i> [1410]</li> <li>- Embryonic shifting dunes [2110]</li> <li>- Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</li> <li>- Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</li> <li>- Humid dune slacks [2190]</li> <li>- Petalwort <i>Petalophyllum ralfsii</i> [1395] (NPWS 2013c)</li> </ul>	- Urbanised areas, human habitation (EEA, 2020b).
South Dublin Bay SAC	The intertidal flats at their widest points are 3km with channels existing at largest with Cockle Lake. A small sandy beach occurs near to Dun Laoighre, with an almost entire artificial embankment. The sediments from the Tolka Estuary vary from thixotropic mud with a high organic content in the inner estuary to a well aerated and exposed sand system off of the Bull Wall. Insights show that many birds who winter in South Dublin Bay do not continue towards North Dublin Bay. (NPWS, 2015a)	<ul style="list-style-type: none"> <li>- Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>- Annual vegetation of drift lines [1210]</li> <li>- <i>Salicornia</i> and other annuals colonising mud and sand [1310]</li> <li>- Embryonic shifting dunes [2110] (NPWS 2013d)</li> </ul>	- Roads, motorways  - Urbanised areas, human habitation (EEA, 2020c)

Site Name	Brief and relevant conservation objectives	Relevant qualifying interests	Project-relevant threats/pressures: Effect (Source)
North Bull Island SPA	<p>This site covers all the inner part of north Dublin Bay, with the seaward boundary extending from Bull Wall lighthouse, to Howth Head. The spit in the north is relatively recent, almost 5km long, 1km wide and running parallel to the coast between Clontarf and Sutton. The saltmarsh extends the length of the landward side of the island, providing the main site for wintering bird roosting in Dublin Bay. The wintering waterfowl use two lagoons as their primary feeding grounds, these lagoons are divided by a causeway (NPWS, 2014b).</p>	<ul style="list-style-type: none"> <li>- Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A046]</li> <li>- Shelduck <i>Tadorna tadorna</i> [A048]</li> <li>- Teal <i>Anas crecca</i> [A052]</li> <li>- Pintail <i>Anas acuta</i> [A054]</li> <li>- Shoveler <i>Anas clypeata</i> [A056]</li> <li>- Oystercatcher <i>Haematopus ostralegus</i> [A130]</li> <li>- Golden Plover <i>Pluvialis apricaria</i> [A140]</li> <li>- Grey Plover <i>Pluvialis squatarola</i> [A141]</li> <li>- Knot <i>Calidris canutus</i> [A143]</li> <li>- Sanderling <i>Calidris alba</i> [A144]</li> <li>- Dunlin <i>Calidris alpina</i> [A149]</li> <li>- Black-tailed Godwit <i>Limosa limosa</i> [A156]</li> <li>- Bar-tailed Godwit <i>Limosa lapponica</i> [A157]</li> <li>- Curlew <i>Numenius arquata</i> [A160]</li> <li>- Redshank <i>Tringa totanus</i> [A162]</li> <li>- Turnstone <i>Arenaria interpres</i> [A169]</li> <li>- Black-headed Gull <i>Chroicocephalus ridibundus</i> [A179]</li> <li>- Wetland and Waterbirds [A999] (NPWS, 2015b)</li> </ul>	<ul style="list-style-type: none"> <li>- Continuous urbanisation</li> <li>- Other patterns of habitation (EEA, 2020d)</li> </ul>
South Dublin Bay and River Tolka Estuary SPA	<p>This site covers a large part of the Dublin Bay, including the intertidal area of the River Liffey and Dun Laoghaire, along with the estuary of the River Tolka to the north of the River Liffey and Booterstown Marsh. The south of the bay has intertidal flats that at their widest extend for almost 3km. The site is important for wintering fowl, integral for the importance of the Dublin Bay complex (NPWS, 2015c).</p>	<ul style="list-style-type: none"> <li>- Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A046]</li> <li>- Oystercatcher <i>Haematopus ostralegus</i> [A130]</li> <li>- Ringed Plover <i>Charadrius hiaticula</i> [A137]</li> <li>- Grey Plover <i>Pluvialis squatarola</i> [A141]</li> <li>- Knot <i>Calidris canutus</i> [A143]</li> <li>- Sanderling <i>Calidris alba</i> [A144]</li> <li>- Dunlin <i>Calidris alpina</i> [A149]</li> <li>- Bar-tailed Godwit <i>Limosa lapponica</i> [A157]</li> <li>- Redshank <i>Tringa totanus</i> [A162]</li> <li>- Black-headed Gull <i>Chroicocephalus ridibundus</i> [A179]</li> <li>- Roseate Tern <i>Sterna dougallii</i> [A192]</li> </ul>	<ul style="list-style-type: none"> <li>- Roads, motorways</li> <li>- Urbanised areas, human habitation (EEA, 2020e)</li> </ul>

Site Name	Brief and relevant conservation objectives	Relevant qualifying interests	Project-relevant threats/pressures: Effect (Source)
		<ul style="list-style-type: none"> <li>- Common Tern <i>Sterna hirundo</i> [A193]</li> <li>- Arctic Tern <i>Sterna paradisaea</i> [A194]</li> <li>- Wetland and Waterbirds [A999] (NPWS, 2015d)</li> </ul>	
North-West Irish Sea cSPA	<p>The North-west Irish Sea cSPA constitutes an important resource for marine birds, it includes the estuaries and bays that open into it along with the collection of intertidal and subtidal habitats that stretch along the coast. These areas provide habitats for foraging and maintenance for QI seabirds on the north-west Irish Sea's islands and coastal headlines which are important during and outside the breeding period. The site is of conservation interest for many bird species (NPWS, 2023).</p>	<ul style="list-style-type: none"> <li>- Common Scoter <i>Melanitta nigra</i> [A065]</li> <li>- Red-throated Diver <i>Gavia stellata</i> [A001]</li> <li>- Great Northern Diver <i>Gavia immer</i> [A003]</li> <li>- Fulmar <i>Fulmarus glacialis</i> [A009]</li> <li>- Manx Shearwater <i>Puffinus puffinus</i> [A013]</li> <li>- Shag <i>Phalacrocorax aristotelis</i> [A018]</li> <li>- Cormorant <i>Phalacrocorax carbo</i> [A017]</li> <li>- Little Gull <i>Larus minutus</i> [A177]</li> <li>- Kittiwake <i>Rissa tridactyla</i> [A188]</li> <li>- Black-headed Gull <i>Chroicocephalus ridibundus</i> [A179]</li> <li>- Common Gull <i>Larus canus</i> [A182]</li> <li>- Lesser Black-backed Gull <i>Larus fuscus</i> [A183]</li> <li>- Herring Gull <i>Larus argentatus</i> [A184]</li> <li>- Great Black-backed Gull <i>Larus marinus</i> [A187]</li> <li>- Little Tern <i>Sterna albifrons</i> [A195]</li> <li>- Roseate Tern <i>Sterna dougallii</i> [A192]</li> <li>- Common Tern <i>Sterna hirundo</i> [A193]</li> <li>- Arctic Tern <i>Sterna paradisaea</i> [A194]</li> <li>- Puffin <i>Fratercula arctica</i> [A204]</li> <li>- Razorbill <i>Alca torda</i> [A200]</li> <li>- Guillemot <i>Uria aalge</i> [A199]</li> </ul>	No published threats or pressures by NPWS to date.

## 5 Other Relevant Plans and Projects

### 5.1 Cumulative Effects

As part of the Screening for an Appropriate Assessment, in addition to the proposed works, other relevant projects and plans in the region that may induce cumulative effects must also be considered at this stage.

### 5.2 Plans

- South Dublin County Development Plan 2022-2028
- Greater Dublin Drainage Strategy
- Third Cycle River Basin Management Plan for Ireland 2022-2027
- Planning Applications (retrieved from Data.gov.ie - Planning Application Sites, October 2023)

#### 5.2.1 South Dublin Development Plan 2022-2028

The South Dublin County Development Plan 2022-2028 was made on 22nd June 2022 and came into effect on 3rd August 2022. The County Development Plan sets out the framework to guide future development in South Dublin with the focus placed on the places we live, the places we work, and how we interact and move between these places while protecting our environment. The aim is to progress to a more sustainable development pattern for South Dublin in the immediate and long-term future up to 2040 and beyond.

A Screening for Appropriate Assessment was carried out on the plan, which was concluded that an Appropriate Assessment was necessary for this project. The associated Natura Impact Report concluded that there are no likely significant direct, indirect, or secondary impacts of the project on any Natura 2000 sites (SDCC, 2022b), **therefore the SDCC Development Plan is not anticipated to contribute to cumulative or in-combination effects.**

#### 5.2.2 Greater Dublin Drainage Strategy

The Greater Dublin Drainage Strategy sets out the strategic planning for the development of wastewater treatment in the Greater Dublin Area in relation to the Ringsend Wastewater Treatment Plant (WWTP) Upgrade, Greater Dublin Drainage Project and associated wastewater network drainage projects (Irish Water, 2018). The proposed developed connects with the Local Authority sewer system which is included in this strategy. The Ringsend WWTP Upgrade includes plans to expand the WWTP to its ultimate capacity, together with associated network upgrades required. The Greater Dublin Drainage Project is planned to relieve both the Ringsend WWTP and network loading by construction of a new WWTP at Clonsaugh, an orbital sewer and provision of an outfall pipe discharging 1km north-east of Ireland's Eye. The Ringsend WWTP upgrade is in progress and carried



out in stages, with an increased capacity of 400,000 PE by the first half of 2021 and the ultimate capacity of 2.4 million PE to be in operation by 2025 (Irish Water, 2018). The Greater Dublin Drainage Project is strategically important to the Dublin Region in that it will provide capacity for residential and commercial growth (Irish Water, 2018).

**Overall, the Greater Dublin Drainage Strategy is not considered to adversely affect any Natura 2000 site, nor is it expected to contribute to any cumulative or in-combination effects.**

### 5.2.3 River Basin Management Plan for Ireland 2022-2027

The Water Framework Directive requires that all waters, including surface and groundwater sources, are protected and that measures are put in place to ensure quality of these waters is restored to at least 'good' status or good potential by 2027 at the latest. The directive requires reporting of river basin management plans to assess the waterbodies, their pressures, and relevant plans towards achieving good status. In implementing the river basin management plan, the objective is to ensure that natural waters are sustainably managed and that freshwater resources are protected so as to maintain and improve Ireland's water environment.

**The Third Cycle River Basin Management Plan for Ireland 2022-2027 is not anticipated to contribute to cumulative or in-combination effects.**

## 5.3 Other Projects

Planning applications in the vicinity of the proposed site which could act in-combination with the works at the site were extracted from National Planning Application dataset (Table 5-1). Planning applications that have been granted permission within the last three years are considered. Applications for home extensions, internal alterations and retention are not considered.

Table 5-1: Other projects within approximately 2km which may have an accumulative effect on the development of the project.

Planning Reference	Address	Application Status	Decision date	Summary of development
FW20A/0222	Marymount Care Centre, Westmanstown, Lucan, Co. Dublin	Granted	25/02/2021	The development will consist of 12no. 2 bedroom semi-detached independent living units in 6no. single storey blocks to the rear of the existing care centre, a new single storey covered walkway connecting the units to the existing care centre, a new brick outer leaf at ground floor level on the north-west and south-west corners of the existing building adjacent to unit no.1, 12 additional car parking spaces, an extended access road and all associated site works.
FW21A/0045	Lutterellstown, Diswellstown, Castleknock, Dublin 15	Granted	26/04/2021	Adjustment of the alignment of the spoil store granted under planning ref FW18A/0126 construction of new 260m2 industrial garage for summer storage of 4 No. Road Gritters. Removal of existing berm along M50 to provide additional parking contractor vehicles on site and replanting the M50 boundary to screen proposed works. Relocation of 2 no. concrete supply silos from south bound depot area (across M50 to this site. Provision of 6m high site and security lighting poles with LED lighting. All associated and ancillary, drainage, ground site works

## 6 Screening Assessment

### 6.1 Introduction

This screening exercise will focus on assessing the likely adverse effects of the project on the Natura 2000 sites identified in Section 4 above.

Of the designated sites recorded within the zone of influence of the development, further assessment is required for the following sites using a Source-Pathway-Receptor model:

- Rye Water Valley/Carton SAC 001398
- North Dublin Bay SAC 000206
- South Dublin Bay SAC 000210
- North Bull Island SPA 004006
- South Dublin Bay and River Tolka Estuary SPA 004024
- North-West Irish Sea cSPA 004236

This section identifies the potential effects which may arise as result of the proposed project on these European Sites. It then goes on to identify how these effects could potentially affect Natura 2000 sites listed above. The significance of potential effects is also assessed, with any potential in-combination effects also identified.

### 6.2 Assessment Criteria

6.2.1 Description of the individual elements of the project (either alone or in combination with other plans or project) likely to give rise to effects on the Natura 2000 sites.

Potential adverse effects that could cause a likely significant effect on the qualifying interests of the Natura 2000 sites, or the sites as a whole, during the construction and operational phases of the project, are considered using three main pathways: surface water, groundwater and land and air pathways.

Surface water pathways can result in effects where material entering the surface water drainage are carried in this water to sites that are connected downstream and can therefore effect surface water bodies themselves, and surface water dependent species and habitats that rely on them.

Groundwater pathways can transmit effects where there is contamination of water entering the groundwater body which is then discharged (sometimes over periods of several decades) and effects groundwater dependent habitats and species that rely on them.

Land pathways are related to physical disturbance of habitats or species and generally only occur over short physical distances. Air pathways relate to the transport of material, generally dust and atmospheric pollution, via air movements that are

subsequently deposited on habitats and species in or connected to the Natura 2000 sites.

The proposed project is not anticipated to effect on the qualifying interests of any of the identified SACs or SPAs. The rationale for excluding effects via the main pathways is given in more detail in the following section.

### 6.2.2 Surface Water Pathways

Pre-construction there is no direct surface water pathway from the proposed site; two rivers are located close to the site; the Griffeen River (285m) and the River Liffey (220m). The Griffeen river flows north and hydrologically connects to the main body of the River Liffey, which then flows into Dublin Bay. Additionally, indirect hydrological connections are present through groundwater-to-surface and dust-to-surface water (air) due to the site's proximity to the River Liffey and the Griffeen River.

Therefore, indirect hydrological connections exist between the site and the five Natura 2000 sites associated with Dublin Bay/Irish Sea, however, no hydrological connection is present between the site and Rye Water Valley/Cartron SAC.

The only connection of the proposed site to the five Natura 2000 sites in Dublin Bay/Irish Sea is during the operation phase via the surface water network discharging to the South Dublin Surface Water Drainage System and foul water sewers which are directed to Ringsend WWTP.

The outfall from Ringsend WWTP is at Poolbeg, which is within the waterbody Liffey Estuary Lower [IE\_EA\_090\_0300]. This is a transitional water body with an Ecological Status of Moderate and a WFD Risk of 'At risk' (Transitional water body data 2010-15, EPA, 2019). The outer estuary/Dublin Bay (coastal water body IE\_EA\_090\_0000) has a status of Good with a WFD Risk of Not at risk.

#### *Construction Phase*

During the construction phase potential pollutants will be present on-site, including hydrocarbons and hydrological oils that will be utilised by machinery on-site. These pollutants could potentially spill or leak into the local surface water network, which would ultimately result in them entering the River Griffeen and River Liffey before ending up in Dublin Bay. Additionally, topsoil will be removed as a part of the works, which may lead to increased sediment-loading within the local surface water network. Furthermore, dust will be generated during excavations and may settle within the local watercourses, which would also potentially increase the suspended sediments within the surface water network.

Construction management measures will comply with the Greater Dublin Regional Code of Practice for Drainage Works (Dublin City Council, 2021). The first objective of the Code of Practice is Compliance with best environmental practices and relevant environmental legislation such as the Water Framework Directive. Any potential runoff from the site will be contained within the site boundary until the attenuation system is

installed. In the event of any potential surface water runoff entering the Griffeen and Liffey would need to travel approximately 19.6km and 17.6km respectively via surface water pathways to the nearest Natura 2000 sites associated with the Dublin Bay. Given the natural retention and dilution of pollutants (over 19.6km and 17.6km), any pollutants which exit the site and reach the Dublin Bay Natura 2000 sites, will not do so in any volume capable of resulting in adverse effects.

### *Operation Phase*

During the operational phase of the proposed development, an appropriate SuDS attenuation system will ensure that no sediment or pollution will enter the surface water drainage system in accordance with the Greater Dublin Regional Code of Practice for Drainage Works.

All foul water discharge in the proposed site will connect to the SDCC foul water drainage system which is eventually directed to Ringsend WWTP.

**Therefore, given the scale and nature of works, incorporation of sustainable drainage design, and following the Greater Dublin Regional Code of Practice for Drainage Work, in association with the hydrological distance to any Natura 2000 sites, significant adverse effects are not anticipated for any Natura 2000 during the construction and operation phases of the project.**

### *Groundwater*

During the construction phase potential pollutants will be utilised at the site, including diesel and engine/hydraulic oils. These pollutants could potentially spill or leak into the groundwater. The site is underlain by the Dublin groundwater body, which the site shares with the Rye Water Valley/Carlton SAC, and the Dublin Bay Natura 2000 sites (Figure 6-2). However, given that aquifer flow paths will only extend a few hundred metres, pollutants absorbed into the aquifer on-site will be discharged into the local surface waters and will not be able to reach any of the Natura 2000 sites via a direct the groundwater pathway.

However, due to this discharge into the local surface waters, there is an indirect link between the groundwater and the Dublin Bay Natura 2000 sites through this ground-surface water pathway. However, as outlined in Section 6.2.2, any potential ground-to-surface water pollutants entering the Griffeen and Liffey Rivers would need to travel over approximately 17.6km via surface water pathways to the nearest of the Dublin Bay Natura 2000 sites. Given the natural retention and dilution of pollutants (over 17.6km), any pollutants which exit the site and reach the Dublin Bay Natura 2000 sites, will not do so in any volume capable of resulting in adverse effects.

**Therefore, likely significant effects via the ground-to-surface water pathway are not anticipated during the construction and operational phases for the Natura 2000 sites within the ZOI.**

## Land and Air

The loss or degradation of supporting habitats outside the identified Natura 2000 sites via land- and air- based effects could result in potential adverse effects on a number of QIs associated with these Natura 2000 sites. Land and air pathways are assessed separately below.

### Land (Physical and on-site and noise disturbance)

Direct physical effects and indirect effects, such as visual and noise effects, do not have the potential to physically disturb Natura 2000 habitats, as well as the QI flora and fauna species within them, due to the distance from the proposed site to any of the Natura 2000 sites within the Zol.

**As the proposed development will not result in any physical land-take from the Natura 2000 sites within the Zol, therefore, likely significant effects are not anticipated for the any of the Natura 2000 sites, and their respective QIs.**

The proposed site is not considered to provide suitable ex-situ foraging habitat for any QIs of the Natura 2000 sites. The site is in an urban location, closely surrounded by housing, therefore, effects via land pathways in terms of ex-situ supporting habitats are not anticipated to have a significant effect on any of the Natura 2000 sites.

**Therefore, in regard to disturbance, likely significant effects are not anticipated during the construction and operational phases for the any of the Natura 2000 sites, and their respective QIs.**

### Air Pollution

Excavations at the site will produce loose top and sub-soil, and emissions may arise from working machinery. Dust release and vehicle emissions can travel considerable distances and could potentially have an effect on the QIs of Natura 2000 sites. The recommended buffer for dust and air pollution is 500m as a baseline, however, the distance and direction of travel is also influenced by wind speed and direction.

The prevailing wind in the area is south-west (based on measurements carried out between 2000-2022 at Dublin (Dublin Airport ((Windfinder.com, 2023))). Therefore, any dust that is generated on-site will most likely be transported towards the Natura 2000 sites within the Zol. The urban setting of the proposed route also provides barriers, such as buildings and treelines, which will prevent further dispersal of particles.

There will be an increase in local traffic attending the site during construction, resulting in an increase in NOx emissions, however, vehicular emissions and dust emissions are not anticipated to significantly affect the QIs of the any Natura 2000 sites due to the relatively small size and temporary nature of proposed works, and the prevailing wind direction.

**Therefore, due to the distance and the lack of connection, likely significant effects via the air pathway are not anticipated during the construction and operational phases for the Natura 2000 sites and their respective QIs.**

### 6.2.3 Cumulative Effect

Given the proximity of the other relevant plans and project developments in Section 5, to the proposed site, their connectivity in terms of surface water, groundwater and land & air pathways to the Natura 2000 sites is likely to be similar to the proposed site. With this in consideration and the fact that that the proposed development will not potentially have an effect on the QIs or conservation objectives of any Natura 2000 site, it can be stated that there is no potential for cumulative effects to occur.

### 6.2.4 Summary

Due to the location of the proposed site, the temporary nature of the works and its distance to the Natura 2000 sites within the ZoI, the proposed project is not anticipated to have a significant effect via surface water, groundwater, groundwater to surface water, and land and air pathways to any Natura 2000 site.

### 6.2.5 Description of likely direct, indirect or secondary effects of the project (either alone or in combination with other plans or projects) on the Natura 2000 sites

Project Elements	Comment	
Size and scale	<p>The project includes the establishment of a series of dwellings located in an age-friendly infill social housing within existing residential area. The proposed dwellings are designed as infill housing and as a continuation of the existing terraced housing to the south-east. The north of the site is facing onto existing public footpath, with residential dwelling behind. The existing terraced residential units with their rear gardens are adjacent to the west of the site. The site is free of onsite services, and it is undeveloped. The development consists of:</p> <p>4 no's of 1-bedroom apartments, housed in a 2 storey building, 1 no of standard 1-bedroom single storey dwelling type.</p>	
Land-take	There will be no direct land take from any of Natura 2000 sites.	
Distance from Natura 2000 site or key features of the site	<ul style="list-style-type: none"> <li>• Rye Water Valley/Carton SAC</li> <li>• North Dublin Bay SAC</li> <li>• South Dublin Bay SAC</li> <li>• North Bull Island SPA</li> <li>• South Dublin Bay and River Tolka Estuary SPA</li> <li>• North-West Irish Sea cSPA</li> </ul>	<ul style="list-style-type: none"> <li>• 2.9km</li> <li>• 17.5km</li> <li>• 15.6km</li> <li>• 13.1km</li> <li>• 15.6km</li> <li>• 19.8km</li> </ul>
Resource requirements (water abstraction etc.)	There will be no water abstraction requirement.	
Emissions (disposal to land, water or air)	<p><b>Construction Phase:</b></p> <p><b>Water</b></p> <p>The proposed site lacks any direct hydrological links with the Natura</p>	

Project Elements	Comment
	<p>2000 sites within the Zol. Therefore, surface water-based emissions to the local freshwater systems flowing into the Natura 2000 sites is not anticipated. Construction management measures will comply with the Greater Dublin Regional Code of Practice for Drainage Works (Dublin City Council, 2021).</p> <p><b>Air</b></p> <p>Excavations at the site will produce loose topsoil and dust, and emissions may arise from working machinery. However, this is not anticipated to have a significant effect on habitats or species of any Natura 2000 site due to the distance, general wind direction and the presence of barriers such as buildings in the urban sections of the route.</p> <p><b>Operation phase:</b></p> <p>There will be an increase in foul water emissions at the site, due to the developments, but all associated sewage will be connected to nearby sewage treatment WWTP at Ringsend. SuDS system will limit surface water runoff.</p> <p>The proposed operations of the project (and its related emissions) are not expected to directly have an effect on any of the Natura 2000 sites, due to their distance and small-scale operation. Therefore, there will be no permanent effects on any Natura 2000 site.</p>
Excavation requirements	<p>Excavations throughout the site will be mixed to accommodate a range of proposed features:</p> <p>The proposed residential site, except attenuation areas, may exceed 1.2m depending on detailed design stage.</p> <p>Any attenuation areas, if required, to be max 1.8m.</p> <p>Minor additional excavations may be required for a footpath.</p>
Transportation requirements	<p><b>Temporary Effects:</b></p> <p>Levels of traffic to the site during the construction phase will increase traffic to the area but will be temporary in nature. All access to the site will be on pre-existing roads and transportation requirements will not affect Natura sites.</p> <p><b>Permanent Effects:</b></p> <p>Given the size, scale and location of the proposed project, transportation requirements will not affect Natura 2000 sites.</p>
Duration of construction, operation, decommissioning etc.	<p>The construction period is anticipated to be 10-12 months, beginning April/May 2024.</p>
Other	<p>None</p>

### 6.2.6 Description of likely changes to the Natura 2000 sites

Potential Effect	Comments
Reduction of habitat area	There will be no reduction in habitat area for any of the Natura 2000 sites.



Potential Effect	Comments
Disturbance to key species	<p><b>Temporary Effects:</b></p> <p>The construction works will temporarily increase the noise level and disturbance locally. However, no significant effects are anticipated to key species given scale and temporary nature of the construction phase and distance from the Natura 2000 sites.</p> <p><b>Permanent Effects:</b></p> <p>No disturbance to key species is anticipated during operation of the project.</p>
Habitat or species fragmentation	There will be no temporary or permanent habitat or species fragmentation within any of the Natura 2000 sites.
Reduction in species density	There will be no temporary or permanent reduction in species density within any of the Natura 2000 sites, or any QIs of these sites.
Changes in key indicators of conservation value (water quality etc.)	There will be no temporary or permanent changes in key indicators of conservation value (surface water, groundwater and air quality).
Climate change	N/A
Interference with the key relationships that define the structure of the site	There will be no interference with the key relationships that define the structure of the sites.
Interference with key relationships that define the function of the site	There will be no interference with the key relationships that define the function of the sites.
Loss (Estimated percentage of lost area of habitat)	No Natura 2000 sites will experience a direct loss in habitat area.
Fragmentation	Fragmentation of habitat and/or species is not anticipated.
Disruption & disturbance	Disruption and/ or disturbance is not anticipated.
Change to key elements of the site (e.g. water quality etc.)	Potential temporary changes to key elements (i.e. water quality) of the site are not anticipated.

6.2.7 Describe from the above those elements of the project or plan, or combination of elements, where the above effects are likely to be significant or where the scale or magnitude of effects is unknown.

Based upon best scientific judgement, significant effects are not expected from the elements mentioned above, and there are no elements where the scale or magnitude of effects is unknown.

### 6.3 Concluding Statement

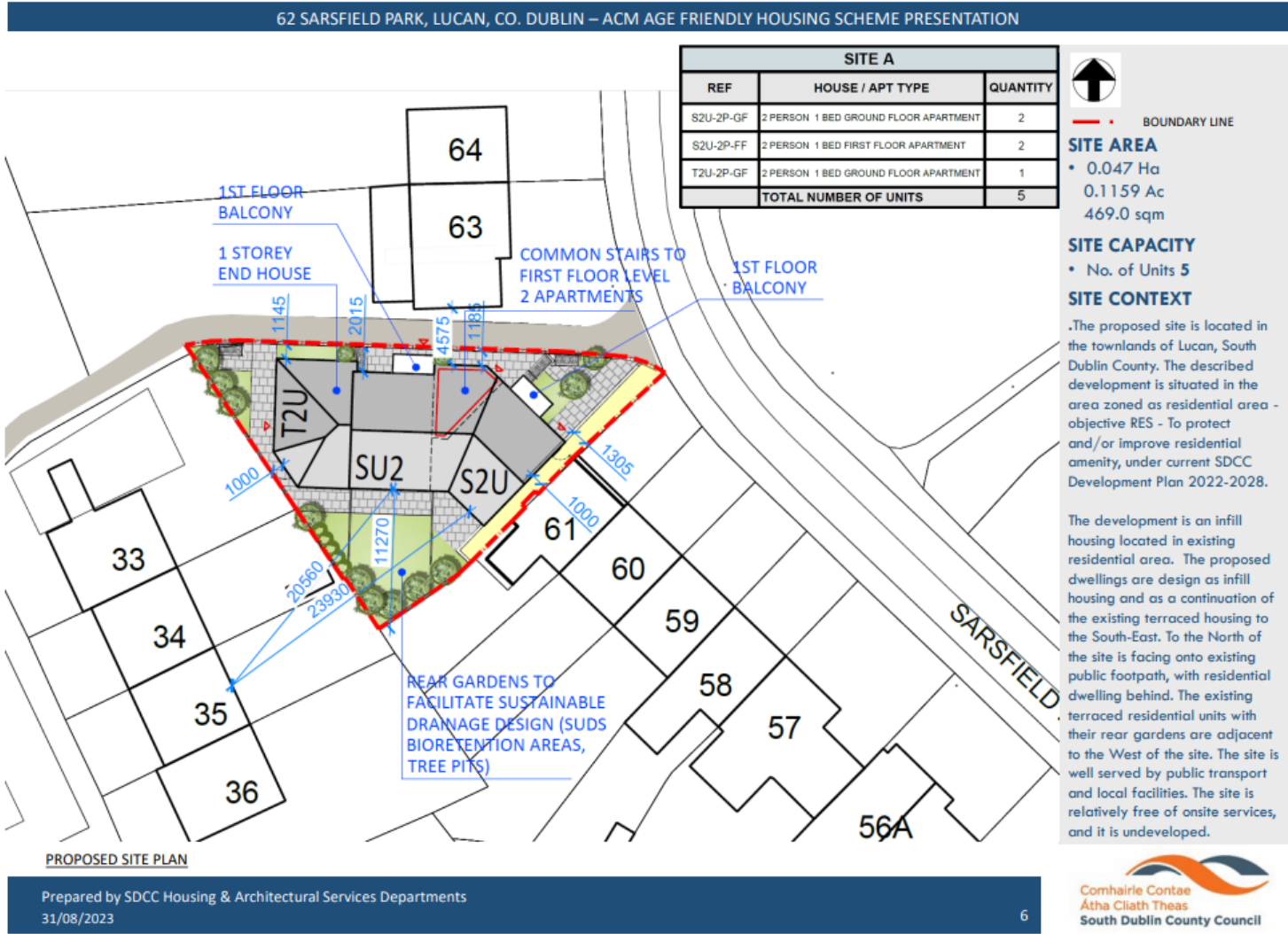
In carrying out this AA screening, mitigation measures have not been taken into account.

**On the basis of the screening exercise carried out above, it can be concluded that the possibility of any significant adverse effects on the Natura 2000 sites within the Zol, whether arising from the project itself or in combination with**

**other plans and projects, can be excluded beyond a reasonable scientific doubt on the basis of the best scientific knowledge available.**

# Appendices

# A Site Layout



## B Protected species recorded within 5km of the site since 01/01/2013.

These records correspond with species covered by national legislation that are publicly available on the NBDC database with an online query (NBDC, 2023).

Species	Date of last record	Dataset	Designation
<b>Amphibians</b>			
Common Frog <i>Rana temporaria</i>	24/04/2018	Amphibians and reptiles of Ireland	Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
Smooth Newt <i>Lissotriton vulgaris</i>	15/06/2020	Amphibians and reptiles of Ireland	Protected Species: Wildlife Acts
<b>Birds</b>			
Barn Owl <i>Tyto alba</i>	07/07/2019	Birds of Ireland	Birds of Conservation Concern - Red List
Barn Swallow <i>Hirundo rustica</i>	16/09/2017	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Black-headed Gull <i>Larus ridibundus</i>	30/12/2022	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Red List
Brent Goose <i>Branta bernicla</i>	02/02/2023	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Common Coot <i>Fulica atra</i>	29/12/2022	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex II Protected Species: EU Birds Directive >> Annex III Birds of Conservation Concern - Amber List
Common Kestrel <i>Falco tinnunculus</i>	27/11/2014	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Common Kingfisher <i>Alcedo atthis</i>	23/02/2023	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex I Bird Species Birds of Conservation Concern - Amber List
Common Linnet <i>Carduelis cannabina</i>	31/03/2023	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Common Pheasant <i>Phasianus colchicus</i>	24/10/2014	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species

Species	Date of last record	Dataset	Designation
Common Pochard <i>Aythya ferina</i>	23/03/2023	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Birds of Conservation Concern - Amber List
Common Snipe <i>Gallinago gallinago</i>	29/12/2022	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Birds of Conservation Concern - Amber List
Common Starling <i>Sturnus vulgaris</i>	23/02/2021	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Common Swift <i>Apus apus</i>	17/07/2023	Swifts of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Common Wood Pigeon <i>Columba palumbus</i>	12/08/2015	Birds of Ireland	Protected Species: Wildlife Acts    Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Great Black-backed Gull <i>Larus marinus</i>	30/12/2022	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Great Cormorant <i>Phalacrocorax carbo</i>	11/01/2023	Birds of Ireland	Protected Species: Wildlife Acts    Birds of Conservation Concern - Amber List
Greater Scaup <i>Aythya marila</i>	02/12/2022	Birds of Ireland	Protected Species: Wildlife Acts    Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Protected Species: EU Birds Directive >> Annex III, Section III Bird Species Birds of Conservation Concern - Amber List
House Martin <i>Delichon urbicum</i>	08/06/2018	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
House Sparrow <i>Passer domesticus</i>	15/01/2021	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List

Species	Date of last record	Dataset	Designation
Lesser Black-backed Gull <i>Larus fuscus</i>	29/12/2022	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Little Egret <i>Egretta garzetta</i>	12/10/2017	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex I Bird Species
Mallard <i>Anas platyrhynchos</i>	23/02/2023	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Mute Swan <i>Cygnus olor</i>	29/12/2022	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Peregrine Falcon <i>Falco peregrinus</i>	16/09/2017	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex I Bird Species
Red Kite <i>Milvus milvus</i>	02/09/2016	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Ringed Plover <i>Charadrius hiaticula</i>	05/03/2023	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Sky Lark <i>Alauda arvensis</i>	05/07/2016	Birds of Ireland	Protected Species: Wildlife Acts Birds of Conservation Concern - Amber List
Tufted Duck <i>Aythya fuligula</i>	11/01/2023	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Birds of Conservation Concern - Amber List
Crustacean			
Freshwater White-clawed Crayfish <i>Austropotamobius pallipes</i>	02/09/2016	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
Mammals			
Daubenton's Bat <i>Myotis daubentonii</i>	31/08/2014	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Eurasian Badger <i>Meles meles</i>	09/05/2018	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts
Eurasian Pygmy Shrew <i>Sorex minutus</i>	11/04/2017	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts

Species	Date of last record	Dataset	Designation
Eurasian Red Squirrel <i>Sciurus vulgaris</i>	21/04/2017	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts
European Otter <i>Lutra lutra</i>	06/12/2018	Mammals of Ireland 2016-2025	Protected Species: EU Habitats Directive >> Annex II Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Lesser Noctule <i>Nyctalus leisleri</i>	08/08/2014	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Pine Marten <i>Martes martes</i>	21/05/2021	Mammals of Ireland 2016-2025	Protected Species: EU Habitats Directive >> Annex V Protected Species: Wildlife Acts
Pipistrelle <i>Pipistrellus pipistrellus sensu lato</i>	06/06/2013	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Red Deer <i>Cervus elaphus</i>	29/05/2018	Mammals of Ireland 2016-2025	Protected Species: Wildlife Acts
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	19/08/2013	National Bat Database of Ireland	Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
West European Hedgehog <i>Erinaceus europaeus</i>	27/11/2022	Hedgehogs of Ireland	Protected Species: Wildlife Acts



## C Invasive species recorded within 5km of the site since 01/01/2013.

These records correspond with species covered by national legislation that are publicly available on the NBDC database with an online query (NBDC, 2023).

Species	Last date of record	Database	Designation
Flatworm			
<i>Arthurdendyus triangulatus</i>	12/03/2017	New Zealand Flatworm <i>Arthurdendyus triangulates</i> Database	Invasive Species >> High Effect Invasive Species
<i>Australoplana sanguinea</i>	28/01/2021	National Invasive Species Database	Invasive Species >> Medium Effect Invasive Species
Flowering Plant			
Black Currant <i>Ribes nigrum</i>	16/09/2017	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> Medium Effect Invasive Species
Butterfly-bush <i>Buddleja davidii</i>	26/02/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> Medium Effect Invasive Species
Canadian Fleabane <i>Conyza canadensis</i>	02/08/2018	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> Medium Effect Invasive Species
Cherry Laurel <i>Prunus laurocerasus</i>	21/04/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> High Effect Invasive Species
Common Broomrape <i>Orobanche minor</i>	29/06/2019	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> Medium Effect Invasive Species
Giant Hogweed <i>Heracleum mantegazzianum</i>	14/06/2021	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> High Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)
Giant-rhubarb <i>Gunnera tinctoria</i>	01/06/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> High Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)
Himalayan Honeysuckle <i>Leycesteria formosa</i>	13/06/2022	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> Medium Effect Invasive Species

Species	Last date of record	Database	Designation
Indian Balsam <i>Impatiens glandulifera</i>	15/09/2022	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> High Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)
Japanese Knotweed <i>Fallopia japonica</i>	14/05/2019	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> High Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)
Nuttall's Waterweed <i>Elodea nuttallii</i>	18/07/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> High Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)
Russian-vine <i>Fallopia baldschuanica</i>	11/08/2020	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species: Invasive Species    Invasive Species: Invasive Species >> Medium Effect Invasive Species
Three-cornered Garlic <i>Allium triquetrum</i>	17/04/2023	Vascular plants: Online Atlas of Vascular Plants 2012 Onwards	Invasive Species >> Medium Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)
Insects			
Harlequin Ladybird <i>Harmonia axyridis</i>	28/09/2023	Ladybirds of Ireland	Invasive Species >> High Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)
Molluscs			
Jenkins' Spire Snail <i>Potamopyrgus antipodarum</i>	05/07/2017	A national macroinvertebrate dataset collected for the biomonitoring of Ireland's river network, 2007–2018 (EPA)	Invasive Species >> Medium Effect Invasive Species
Reptiles			
Red-eared Terrapin <i>Trachemys scripta</i>	24/04/2021	National Invasive Species Database	Invasive Species >> Medium Effect Invasive Species Invasive Species >> EU Regulation No. 1143/2014
Mammals			
American Mink <i>Mustela vison</i>	02/08/2018	Mammals of Ireland 2016-2025	Invasive Species >> High Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)
Brown Rat <i>Rattus norvegicus</i>	20/11/2015	Atlas of Mammals in Ireland 2010-2015	Invasive Species >> High Effect Invasive Species Invasive Species >> Regulation S.I. 477 (Ireland)

Species	Last date of record	Database	Designation
Eastern Grey Squirrel <i>Sciurus carolinensis</i>	17/11/2022	Mammals of Ireland 2016-2025	Invasive Species >> High Effect Invasive Species Invasive Species >> EU Regulation No. 1143/2014 Invasive Species >> Regulation S.I. 477 (Ireland)
European Rabbit <i>Oryctolagus cuniculus</i>	31/03/2023	Mammals of Ireland 2016-2025	Invasive Species >> Medium Effect Invasive Species

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