New Public Realm and Plaza East and North of Waldemar Terrace

Ecological Impact Assessment

12/11/2026

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Contents

1	**Introduction**		**1**
	1.1	Background	1
	1.2	Aims	1
	1.3	Site Location	1
2	**Project Description**		**3**
	2.1	The Project	3
	2.2	Landscape Plan	3
	2.3	Drainage Layout	4
	2.4	Lighting Plans	5
	2.5	Excavation Depths	5
	2.6	Construction Duration	5
3	**Existing Environment**		**6**
	3.1	The EcIA Team	6
	3.2	Policy and Legislation	6
	3.3	Methods	6
	3.4	Guidance	6
	3.5	Baseline	6
	3.6	Screening of Ecological Features	10
	3.7	Assessment of the Effects on Features	11
	3.8	Valuation of Receptors	11
	3.9	Cumulative Impacts	19
	3.10	Limitations and Constraints	19
4	**Baseline conditions**		**20**
	4.1	Desk-based Assessment	20
	4.2	Water Framework Directive	32
	4.3	Site Visit	35
	4.4	Habitats	36
	4.5	Rare & Protected Flora	45
	4.6	Protected Fauna	45
	4.7	Invasives Non-native Species	49
	4.8	Ecological Features Considered for Further Assessment	52

5 Other Relevant Plans and Projects 56

5.1 Cumulative Effects 56

5.2 As part of the impact assessment process, a cumulative assessment of the effects of the Proposed Development with the effects of other existing and / or approved projects is considered. The list of plans and projects are outlined belowPlans 56

5.3 Other Planning Applications 58

6 Impact Assessment 74

6.1 Introduction 74

6.2 Do Nothing Scenario 74

6.3 Construction Phase 74

6.4 Operation Phase 79

6.5 Summary 82

7 Mitigation 83

7.1 Project Construction Phase 83

7.2 Operational Mitigation 92

8 Residual Impacts 93

8.1 Habitats 93

8.2 Fauna 94

8.3 Summary 94

9 Summary of Impact Statement 95

9.1 EcIA Table 95

9.2 Cumulative Impacts 104

10 Conclusion 105

A Site Layout I

B Site Landscape Plan II

C Site Drainage Layout III

D Site Lighting Plan IV

E NBDC Records V

E.1 Protected species recorded within 2km of the site within the last 10 years V

E.2 Invasive species recorded within 2km of site within the last 10 years XIV

F Relevant Policy and Legislation XVII

F.1 Biodiversity Policy Guidance XVII

F.2 Designated Sites and Nature Conservation XVII

List of Figures

Figure 1-1: Site location with site boundary (©OSM, 2026) 2

Figure 3-1: Chart showing the typical classifications of the significance of effects (EPA, 2022) 17

Figure 4-2: pNHA designated sites within the ZoI of the site works (©OSM, 2026) 27

Figure 4-3: Sub-catchments and the local watercourses (©OSM, 2026) 33

Figure 4-4: Groundwater bodies within the locality of the site (©OSM, 2026) 34

Figure 4-5: Groundwater vulnerability on site and in the local area (©OSM, 2026) 35

Figure 4-6: Habitats recorded on site classified by Fossitt (2000) (OSM, 2026) 37

Figure 4-7: Artificial surfaces dominating the site 38

Figure 4-8: Steep bank in the north-east section of the site containing amenity grassland 39

Figure 4-9: Amenity grassland and bare ground mosaic underneath the Luas bridge 40

Figure 4-10: Amenity grassland and ornamental/non-native mosaic 41

Figure 4-11: Small dry meadow bank along the eastern site boundary 42

Figure 4-12: Hedgerow located at the top of the steep bank outside the north-east section of the site 43

Figure 4-13: Small area of planted ornamental/non-native shrub along the southern boundary of the site 44

Figure 4-14: River Slang located 18m west of the site 45

Figure 4-15: Butterfly-bush recorded within the amenity grassland and ornamental shrub 51

List of Tables

Table 3-1: Criteria examples used to define the value of ecological features (derived NRA, 2008, rev. 2009) 11

Table 3-2: Examples of criteria used to define the value of ecological features of local importance (NRA, 2009) 12

Table 3-3: Categories of Effects (derived EPA, 2022) 14

Table 3-4: Simplified Significance of Effects matrix 18

Table 4-1 Natura 2000 sites within ZoI of the proposed site 20

Table 4-2: Site briefs; QIs / SCIs; and project-relevant threats /pressures and their impacts and sources to the Natura 2000 sites within the ZoI 22

Table 4-3: Proposed Natural Heritage Areas within the Source-Pathway-Receptor model. 27

Table 4-4: Site briefs and ecological features of conservation concern of the proposed Natural Heritage Areas within the ZoI 28

Table 4-5: INNS recorded within or immediately adjacent to the site of proposed works 31

Table 4-6: The WFD waterbodies within ZoI of the proposed works 32

Table 4-7: Habitats recorded during the site visit 36

Table 4-8: Protected bird species recorded within NBDC records 47

Table 4-9: Summary of ecological features requiring impact assessment 52

Table 5-1: Projects granted planning permission vicinity of proposed site 59

Abbreviations

AA	Appropriate Assessment
BOCCI	Birds of Conservation Concern in Ireland
CIEEM	Chartered Institute of Ecology and Environmental Management
DEHLG	Department of Environment, Heritage and Local Government
DHPLG	Department of Housing, Planning and Local Government
DLRCC	Dún Laoghaire-Rathdown County Council
EC	European Communities
ECJ	European Court Judgement
EPA	Environmental Protection Agency
GIS	Geographic Information Systems
GSI	Geological Survey Ireland
IAQM	Institute of Air Quality Management
IFI	Inland Fisheries Ireland
INNS	Invasive Non-Native Species
IROPI	Imperative Reasons of Over-riding Public Interest
NBDC	National Biodiversity Data Centre
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Services
OPW	Office of Public Works
QI	Qualifying Interest
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SCI	Special Conservation Interest
SPA	Special Protection Area
SuDS	Sustainable Urban Drainage Systems
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 Dún Laoghaire-Rathdown County Council (DLRCC) to prepare an Ecological Impact Assessment (EcIA) for the proposed works to be carried out at Main Street, Dundrum, D14 XV10, Co. Dublin.

1.2 Aims

The aims of this EcIA are to:

- Establish baseline ecological conditions to enable identification of potentially important ecological features within the Zone of Influence (ZoI) of the project;
- Determine the ecological value of identified ecological features;
- Assess the significance of impacts of the proposed project on ecological features of value;
- Identify avoidance, mitigation or compensatory measures;
- Identify residual impacts after mitigation and the significance of their effects; and
- Identify opportunities for ecological enhancement.

1.3 Site Location

The proposed development is located at the intersection of the R112 and R117 in Dundrum, Co. Dublin. The site is situated underneath William Dargan Bridge, and adjacent to the Dundrum Luas Station. The surrounding environment is semi-urban, consisting of residential housing estates, industrial sites, local access roads, urban transportation and associated services (Figure 1-1).

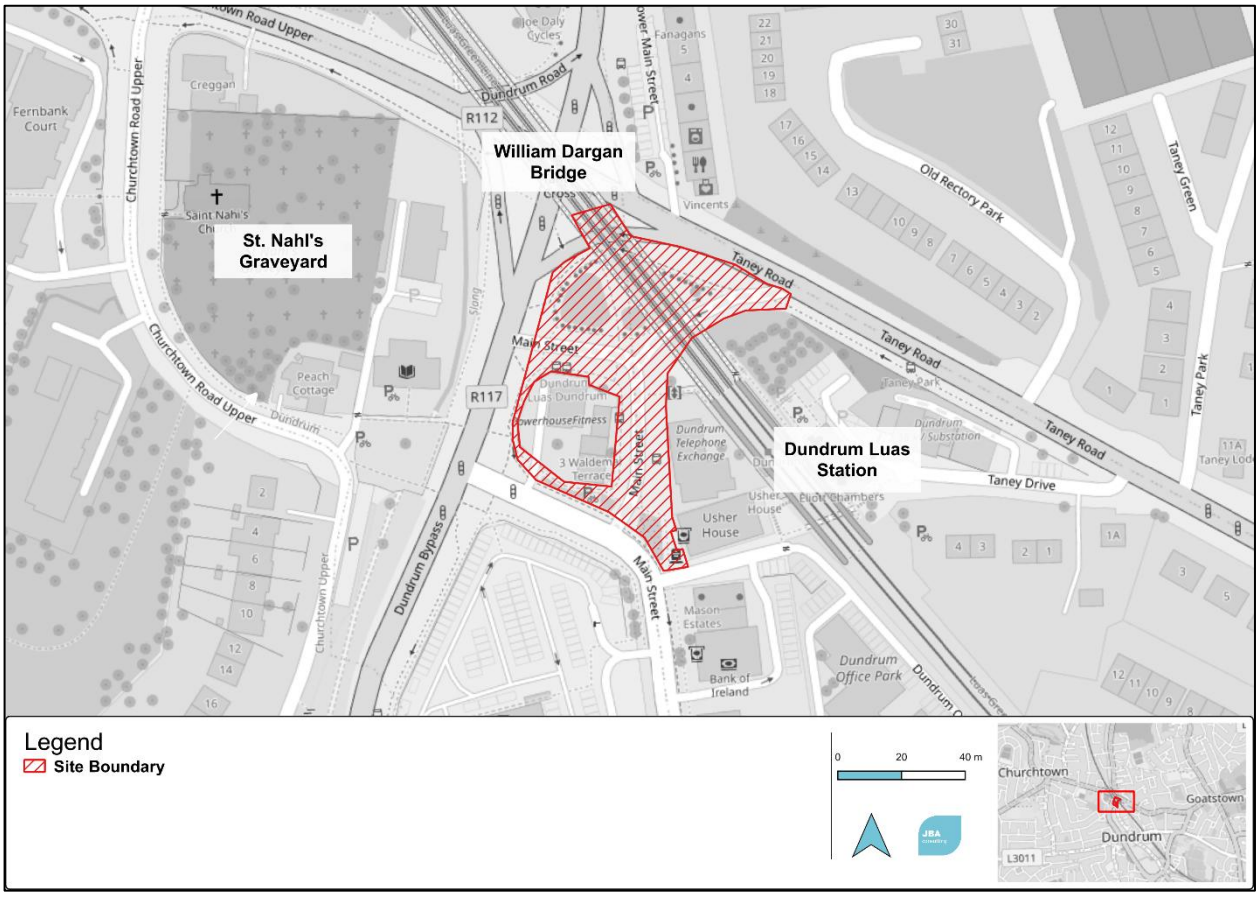


Figure 1-1: Site location with site boundary (©OSM, 2026)

2 Project Description

2.1 The Project

Dún Laoghaire-Rathdown County Council are proposing to construct a new public realm and plaza East and North of Waldemar Terrace, Main Street, Dundrum, Dublin 14.

The proposed development is set out below:

- Reallocation of c. 1057 m² of road as public realm;
- New public realm of c. 3001 m², including a new civic plaza with high-quality paving, resurfacing, street furniture, and public lighting on independent columns; new accessible, raised podium; new incidental play areas; new mobility hub for cycle parking; retention of existing bike shelter and associated cycle parking; upgrade of existing pedestrian crossing;
- New landscaping, including tree planting and sustainable urban drainage system (SuDS); removal of 7 existing trees on site; removal and relocation of 5 existing trees on site; and retention of 1 existing tree on site.
- Drainage, utility, and all ancillary works.

These details are shown in the site layout plan, in Appendix A.

2.2 Landscape Plan

The landscape plan is shown in detail in Appendix B.

2.3 Drainage Layout

2.3.1 Surface Water

Surface water from the proposed scheme will be managed through two new 300mm surface water sewers and one 225mm surface water sewer, which will connect to the existing 750mm surface water outfall traversing through the site. The surface water will then discharge into the River Slang, to the west of the development. Surface water drainage layout is shown in Appendix C.

2.3.2 Sustainable Urban Drainage Systems (SuDS)

The SuDS strategy, at a minimum, intends to mirror the natural drained environment by considering and recognising natural flow paths, with the proposed infrastructure emulating and optimising the management of surface water through detailed site layout design and drainage infrastructure.

Proposed Nature Based SuDS include a combination of:

- Dry and Wet Swales
- Tree Pits
- Filter Drains
- Rain Gardens
- Biofiltration Areas
- Permeable Paving

This includes surfaced impermeable paved areas within the central paved plaza positively draining into proposed nature-based SuDS solutions, while remaining hardstanding areas will infiltrate locally into permeable surfacing, collected by underlying filter drains. Collected surface water from SuDS elements will discharge into proposed conventional piped surface water networks that discharge ultimately into the River Slang.

SuDS features typically promote a reduction in velocity which slows the run-off at source, changing the input hydrograph which will ultimately reduce peak inflow required for attenuation calculations.

In addition, rainfall will ‘wet’ the initial surface of SuDS elements allowing water to be stored in the micro and macrotexture of the surfacing and will be lost to evapotranspiration, giving a reduction in volume. As run-off drains to these SuDS elements and through the build-up, the aggregate/soil surface area will also ‘wet’ giving another reduction of volume due to evapotranspiration and natural storage within the SuDS feature.

Flow-control devices are limited to the bioretention areas indicated, where limited attenuation volumes can be stored without increasing the risk of overland flooding near the confluence with the River Slang to the west of the scheme. It is proposed that orifice sizes be limited to 100mm within bioretention outlet chambers as shown in Appendix C, in accordance with GDSDS recommendations to mitigate blockage risk.

2.4 Lighting Plans

Four artificial lighting columns and luminaires will be removed within the site, one lighting column and luminaire will be removed and replaced with a new lighting column, and one luminaire will be relocated within the site. The remaining existing luminaires and lighting columns will be retained with the existing luminaires remaining with 4000K LED. Additionally, nine Luminaire A lighting fixtures and three Luminaire B fixtures are proposed to be added throughout the site. These lighting columns are proposed to be mounted at 5m with 2700K LED. Gobo ('go between optics') lighting will be limited to a number of locations towards the north of the site, by the bridge and new plaza, and gobos will project on to the ground surfaces.

The lighting plans are shown in detail in Appendix D.

2.5 Excavation Depths

The maximum excavation depth will be approximately 1 metre. The works will include stripping of topsoil within green areas and excavation of subsoil layers within paved areas.

2.6 Construction Duration

The expected duration of construction is to be confirmed.

3 Existing Environment

3.1 The EcIA Team

This EcIA was completed by JBA Assistant Ecologist Abbie Doyle, BSc (Hons) Geoscience, MSc Environmental Science who has 8 months experience in ecological consultancy. The report has been reviewed by Patricia Byrne BSc (Hons) Zoology, PhD, MCIEEM. Patricia is Principal Ecologist with JBA Consulting, with over 20 years' experience in environmental and ecological research, teaching and reporting; and nine years in ecological consultancy. Patricia is a full Member of the Chartered Institute of Ecological and Environmental Management (CIEEM).

These staff members thus fulfil the Environmental Impact Assessment (EIA) Directive personnel requirements of 'competent persons'.

3.2 Policy and Legislation

Policy and legalisation for nature conservation; and protected and priority species relevant to the proposed project is provided in Appendix F.

3.3 Methods

This EcIA assesses the ecological features present within the site and its surrounding area (the ZoI) in relation to the proposed works. This allows for identification of the potential impacts of the proposed works upon the ecological features of the site at an early stage, whilst identifying the potential ecological constraints upon the proposed works. The assessment is based on a desk-based assessment, which determines the baseline conditions at the site of the proposed works, and site surveys, which provided information on habitats and species present on the site and its surroundings.

This EcIA will outline the findings of the desk-based assessment and the surveys and identify any potential impacts of the proposed works on ecological features within the ZoI of the site; and propose mitigation measures to avoid or reduce impacts where necessary.

3.4 Guidance

This assessment was conducted in accordance with the following guidance documents:

- Guidelines for Ecological Impact Assessment in the United Kingdom and Ireland: Terrestrial, Freshwater, Coastal and Marine. Chartered Institute of Ecology and Environmental Management (CIEEM, 2024).
- Guidelines on the information to be contained in Environmental Impact Assessment Reports Environmental Protection Agency (EPA, 2022).
- Best Practice Guidance for Habitat Survey and Mapping, The Heritage Council. (Smith et al., 2011).

3.5 Baseline

To determine the baseline conditions at the site a review of all available information was made. When determining the pre-work conditions on-site, including the presence or absence of

protected habitats and/or species, the precautionary principle was used where limited information was available.

A desk-based assessment was carried out to collate information regarding protected/notable species and statutorily designated nature conservation sites in, or within close proximity to, the study area. This included a data search for protected and notable species using the National Biodiversity Data Centre (NBDC) Mapping System (NBDC, 2026). A customised 2km polygon was created to extract all the species data from the project site's locality.

Information for statutory designated sites including Special Protection Areas (SPAs), Special Areas of Conservation (SACs), Ramsar Sites, Natural Heritage Areas (NHAs) and proposed NHAs (pNHA) was collected from the online resources provided by the National Parks and Wildlife Service (NPWS).

Other information on the local area was obtained, including:

- EPA, 2026a. EPA Catchments.ie [online]. Available online at: https://www.catchments.ie/maps/
- EPA, 2026b. EPA Maps [online], Next Generation EPA Maps. Available online at: https://gis.epa.ie/EPAMaps/
- GSI, 2026. Geological Survey Ireland Spatial Resources website, available at https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228
- NPWS, 2025a. The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neill. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.
- NPWS, 2025b. The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitats Assessment. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neil. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.
- NPWS, 2025c. The Status of EU Protected Habitats and Species in Ireland. Volume 3: Species Assessment. Unpublished NPWS report. Edited by: Deirdre Lynn and Fionnuala O'Neil. . National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin, Ireland.
- Aerial photography available from www.osi.ie, Google Maps http://maps.google.com/ ;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie
- NBDC, 2026 – Species Distribution Maps; Available online at www.biodiversityireland.ie Accessed on various dates;
- All Ireland Red Data lists for vascular flora, mammals, butterflies, non-marine molluscs, dragonflies & damselflies, amphibians and fish;
- Water Framework Directive water maps (available online at http://www.wfdireland.ie/maps.html); and
- International Union for Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species (available online at http://www.iucnredlist.org).

3.5.1 Zone of Influence (ZoI)

The ZoI for the project is based on a judgement of the likely extent of the ecological impacts on key ecological receptors. This will vary for different ecological features, depending on their sensitivities to environmental change. Additionally, the ZoI is informed using the Source-Pathway-Receptor (S-P-R) 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.

The S-P-R method uses an examination of the construction methods, nature of operation or project description and allows sources of impact 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 impact are also analysed to see if a functional pathway for impact is present. This report analyses three pathways: surface water, groundwater and land. Using information gathered from desk sources (e.g. mapped qualifying interests (QIs) and special conservation interests (SCIs) from the conservation objectives (CO) of a Natura 2000 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 or proposed Natural Heritage Areas (pNHAs) can be discounted.

In relation to terrestrial habitats, impacts will be limited to the lands within the site boundary of the proposed development, as well as the immediate surrounding environs (e.g., overshading and soil; root compaction and changes to local hydrological regimes).

Hydrological connections (e.g., drainage ditches, canals, wetlands and rivers) often receive the most far-reaching of impacts due to their lotic or semi-lotic nature. It becomes increasingly difficult to precisely predict the likely significance of adverse water-borne pollutants as they travel downstream from the pollution point source, given potential dilution and retention factors along the course of the impacted watercourse. Under the precautionary principle any designated sites (Natura 2000 and proposed NHA sites), protected habitats or species (flora and fauna) located downstream of the local watercourses, i.e. the North Dublin Bay, South Dublin Bay and Dolphins, Dublin Docks pNHA, will be considered to be within the hydrological ZoI of this proposed development.

Regarding the groundwater-to-surface water impact pathway, the characteristics of the underlying aquifer means it is likely to rapidly discharge to the nearby watercourses, i.e. the stream 465m to the east of the site (GSI, 2026). Therefore, the groundwater-to-surface water ZoI will include this watercourse, with the addition of downstream surface water hydrological connections.

In respect to ZoI for air pollution (emissions and dust), designated sites within a 250m buffer zone of the development sites, were considered as per the Institute of Air Quality Management (IAQM) Guidance on the Assessment of Dust from Demolition and Construction (IAQM, 2024), including ex-situ foraging habitats utilised by protected species associated with the site. In relation to physical (vibration and clearance) works; audible and visual disturbance, faunal species will be considered on a species-by-species basis. Generally, smaller mammal species (e.g., Pygmy Shrew) will be given 100m disturbance zones, which is reflective of their relatively

small territories. For larger mammals, such as Badger, a 150m disturbance zone can be established in the scenario where there is an active sett.

The ZoI for local bats species is centred around lighting impacts within and adjacent to footprint of the development sites, as well as the developments' proximity of known bat roosts within the locality. Impacts are likely to occur within a 3km radius sustenance zone around each of these known bat roosts.

The ZoI for bird species is generally linked with direct habitat loss within the footprint of the proposed development sites. Additional adverse impacts for these birds will likely arise from the disturbance from construction works, which can extend 500m (Cutts et al, 2013) with local designated sites.

The ZoI for amphibians is linked to the foraging, commuting and refuge habitats within eh site, which have the potential to be degraded as a result of the proposed development sites. Therefore, the ZoI for these floral / faunal species will mirror that of the terrestrial habitats.

The ZoI for terrestrial invertebrates is generally linked with direct habitat loss and degradation, as well as construction and operational disturbances. As the furthest impact pathway that can affect terrestrial habitats is 300m, this will also be the ZoI distance for terrestrial invertebrate species.

3.5.2 Field Surveys

A general ecological site walkover, including habitat mapping and preliminary bat roost surveys, was conducted on 07/05/2026 by JBA Ecologists Patricia Byrne and Abbie Doyle.

The ecological walkover surveys recorded habitats and protected species, following guidance outlined in the documents below:

- Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2008)
- Best Practice Guidance for habitat Survey and Mapping. The Heritage Council. (Smith et al., 2011)
- Collins, J. (Ed.), 2024. Bat Surveys for Professional Ecologists: Good Practise Guidelines (4th Edition)
- Ecological Surveying Techniques for Protect Flora and Fauna during the Planning of National Road Schemes (NRA, 2008)

Aerial photographs and site maps assisted the habitat survey. Habitats have been named and classified following A Guide to Habitats in Ireland by Fossitt (2000). Nomenclature for higher plants follows that given in The New Flora of the British Isles 4th Edition (Clive Stace, 2019). Identification of Irish plants generally follows Webb's An Irish Flora (Parnell and Curtis, 2012).

3.5.3 Water Framework Directive

In response to the increasing threat of pollution and the increasing demand from the public for cleaner rivers, lakes and beaches, the EU developed the WFD. This Directive is unique in that, for the first time, it establishes a framework for the protection of all waters including rivers, lakes, estuaries, coastal waters and groundwater, and their dependent wildlife/habitats under one piece of environmental legislation for all European member states.

The WFD (Directive 2000/60/EC) is a substantial piece of EU water legislation that came into force in 2000. The overarching objective of the WFD is for the water bodies in Europe to attain Good or High Ecological Status. The Environment Protection Agency (EPA) is the competent authority in Ireland responsible for delivering the WFD. River Basin Management Plans (RBMP) have been created which set out measures to ensure that water bodies in the country achieve 'Good Ecological Status'.

Good Ecological Quality will depend on the quality of the individual quality elements on which the Ecological status is scored; namely the biological, chemical and morphological condition in a particular water body. Any reduction in any of these elements will result in a reduction of the overall ecological status.

3.5.4 Water Framework Status and Objectives

It is understood that the 'Water Action Plan 2024: A River Basin Management Plan' (DoHLGH, 2024) has been adopted by all local authorities in order to achieve the aims of the WFD. The Plan sets out the new approach that Ireland will take to enhance protection, prevention, and monitoring of Irish waterbodies. The main actions include:

- Improve waste water treatment;
- Conservation and leakage reduction;
- Scientific assessment of water bodies and implementation of local measures;
- A new collaborative Sustainability and Advisory Support Programme;
- Dairy Sustainability Initiative;
- Development of water and planning guidance for local authorities;
- Extension of Domestic Waste Water Treatment Systems grant Schemes; and
- A new Community Water Development Fund

Regardless of their current quality, surface waters should be treated the same in terms of the level of protection and mitigation measures employed, i.e., there should be no negative change in status.

The third and current cycle aims to build particularly on the initiatives of the second cycle, particularly the governance and implementation structures, and to improve the establishment of Irish Water, An Fóram Uisce (The Water Forum), the Local Authority Waters Programme and the Agricultural Sustainability Support and Advisory Programme.

3.6 Screening of Ecological Features

The ecological features identified during the walkover surveys and from desk-based assessments were reviewed.

An informal screening process is presented at the start of the results section to ensure that the assessment focuses only on features where the impact could have important consequences for biodiversity (valued ecological features). Any features which are important beyond the site level were identified for further evaluation. Ecological features with little or no value beyond the site level were screened out and a short statement explaining this is given in the screening section.

3.7 Assessment of the Effects on Features

Ecological features include nature conservation sites, habitats, species assemblages/ communities, populations or groups of species. The assessment of the significance of predicted impacts on ecological features is based on both the 'value' of a feature, and the nature and magnitude of the impact that the project will have on it. The impact is based on the project which includes a certain amount of designed-in mitigation, including construction best practice measures that will be implemented with a high degree of certainty.

3.8 Valuation of Receptors

The value of designated sites, habitats and species populations is assessed with reference to:

- Their importance in terms of 'biodiversity conservation' value (which relates to the need to conserve representative areas of different habitats and the genetic diversity of species populations).
- Any social benefits that habitats and species deliver (e.g., relating to enjoyment of flora and fauna by the public).
- Any economic benefits that they provide.

The valuation of designated sites considers different levels of statutory and non-statutory protection. Assessment of habitat depends on several factors, including the size of the habitat, its conservation status and quality. The assessment also takes account of connected off-site habitat that may increase the value of the on-site habitat through association. Valuation of species depends on a number of factors including distribution, status, rarity, vulnerability, and the population size present.

Designated sites, habitats and species populations have been valued using the scale in (Table 3-1).

Table 3-1: Criteria examples used to define the value of ecological features (derived NRA, 2008, rev. 2009)

Level of Value	Examples of Criteria
International	An internationally important site e.g. Special Protection Area (SPA), Special Area of Conservation (SAC), Ramsar (or a site considered worthy of such designation). A regularly occurring substantial population of an internationally important species (listed on Annex IV of the Habitats Directive). Designated shellfish waters. Major fisheries area.
National	A nationally designated site e.g. Natural Heritage Area (NHA), a proposed Natural Heritage Area (pNHA), statutory Nature Reserve, or a site considered worthy of such designation. A viable area of a habitat type listed in Annex I of the Habitats Directive or of smaller areas of such habitat which are essential to maintain the viability of a larger whole. A regularly occurring substantial population of a nationally important species, e.g. listed on Wildlife Acts 1976-2021 or the Wildlife (Amendment) Act 2023 . A species included in the Irish Red Data Lists/Books. Significant populations of breeding birds.
Regional/County	Species and habitats of special conservation significance within Dublin County. An area subject to a project/initiative under the County's Biodiversity Action

Level of Value	Examples of Criteria
(Dublin County)	Plan. A regularly occurring substantial population of a nationally scarce species.
Local (works site and its vicinity)	Areas of internationally or nationally important habitats which are degraded and have little or no potential for restoration. A good example of a common or widespread habitat in the local area. Species of national or local importance, but which are only present very infrequently or in very low numbers within site area.
Less than local*	Areas of heavily modified or managed vegetation of low species diversity or low value as habitat to species of nature conservation interest. Common and widespread species.
*Not included within the original NRA table. Level of value added to address features with less than 'Local' value	

Guidance published by CIEEM (2018, rev. 2024 recommends breaking down the importance of ecological features in a geographic context similar to the NRA guidance shown in (Table 3-1) with the following frame of reference to be adapted to local circumstances.

- International and European;
- National;
- Regional;
- Metropolitan, County, vice-county or other local authority-wide area;
- River Basin District;
- Estuarine system/Coastal cell; and
- Local

The NRA (2009) guidance is congruent with this CIEEM (2018, rev 2024) guidance and includes a 'Less than local' level. The NRA (2008, rev. 2009) guidance on geographic criteria for ecological valuation, as described in Table 3-1, is utilised as the primary means of habitat valuation assessment in this chapter, as only the NRA guidance provides a split of High and Low level valued local ecological features (see Table 3-2) , which provides more flexibility in regard to assessment of low-valued habitats that still provide ecological services (e.g. monoculture non-native ornamental shrubbery providing nesting opportunities to local breeding bird species).

Table 3-2: Examples of criteria used to define the value of ecological features of local importance (NRA, 2009)

Level of Value	Examples of Criteria
Local Importance (higher value)	Locally important populations of priority species or habitats or natural heritage features identified in the Local Biodiversity Action Plan (BAP), if this has been prepared. Resident or regularly occurring populations (assessed to be important at the Local level) of the following: *Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; *Species of animal and plants listed in Annex II and/or IV of the Habitats Directive; *Species protected under the Wildlife Acts; and/or

Level of Value	Examples of Criteria
	*Species listed on the relevant Red Data List. Sites containing semi-natural habitat types with high biodiversity in a local context and a high degree of naturalness, or populations of species that are uncommon in the locality. Sites or features containing common or lower value habitats, including naturalised species that are nevertheless essential in maintaining links and ecological corridors between features of higher ecological value
Local Importance (lower value)	Sites containing small areas of semi-natural habitat that are of some local importance for wildlife; Sites or features containing non-native species that are of some importance in maintaining habitat links

3.8.1 Magnitude of Impacts

Ecological effects or impacts can be described and categorised in a number of ways. Examples of relevant terms are listed in Table 3-3.

Table 3-3: Categories of Effects (derived EPA, 2022)

Description	Categories of Effects
Quality of Effects	**Positive Effects** A change which improves the quality of the environment (for example, by increasing species diversity; or the improving reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).
	Neutral Effects No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
	Negative/adverse Effects A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem; or damaging health or property or by causing nuisance).
Describing the Significance of Effects	**Imperceptible** An effect capable of measurement but without significant consequences.
	Not Significant An effect which causes noticeable changes in the character of the environment but without significant consequences.
	Slight Effects An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
	Moderate Effects An effect that alters the character of the environment in a manner that is consistent with existing and emerging baseline trends.
	Significant Effects An effect which, by its character, magnitude, duration or intensity, alters a sensitive aspect of the environment.
	Very Significant An effect which, by its character, magnitude, duration or intensity, significantly alters most of a sensitive aspect of the environment.
	Profound Effects An effect which obliterates sensitive characteristics.
Describing the Extent and Context of Effects	**Extent** Describe the size of the area, the number of sites and the proportion of a population affected by an effect.
	Context Describe whether the extent, duration or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?).
Describing the Probability of Effects	**Likely Effects** The effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.
	Unlikely Effects The effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.
Describing the Duration and Frequency of Effects	**Momentary Effects** Effects lasting from seconds to minutes.
	Brief Effects Effects lasting less than a day.

Description	Categories of Effects
	Temporary Effects Effects lasting less than a year.
	Short-term Effects Effects lasting one to seven years.
	Medium-term Effects Effects lasting seven to fifteen years.
	Long-term Effects Effects lasting fifteen to sixty years.
	Permanent Effects Effects lasting over sixty years.
	Reversible Effects Effects that can be undone, for example through remediation or restoration.
	Frequency of effects Describe how often the effect will occur (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually).
Describing the Types of Effects	**Indirect Effects (a.k.a. Secondary or Off-site Effects)** Effects on the environment. Which are not a direct result of the project, often produced away from the project site of because of a complex pathway.
	Cumulative Effects The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.
	Do-nothing Effects The environment as it would be in the future should the subject project not be carried out.
	Worst Case Effects The effects arising from a project in the case where mitigation measures substantially fail.
	Indeterminable Effects The effects arising from a project in the case where mitigation measures substantially fail.
	Irreversible Effects When the character, distinctiveness, diversity or reproductive capacity of an environment is permanently lost.
	Residual Effects The degree of environmental change that will occur after the proposed mitigation measures have taken effect.
	Synergistic Effects Where the resultant effect is of greater significance than the sum of its constituents (e.g. combination of SOx and NOx to produce smog).

3.8.2 Significance of Impacts

The overall significance of an impact can be derived from the total description of the effect compared against the sensitivity and significance (value) of the receptor as shown overleaf in Figure 3-1 which is taken from the EPAs EIAR Guidelines (EPA, 2022). The context and character of the receptor must also be assessed, such as its position in relation to the effect and its connectivity to the effect, however this should be determined before assessing the significance of the impact.

The total description of the effect includes the character, magnitude, probability and consequences of the effect as described in Figure 3-1 which are combined to give a general description of the effect on an ordinal scale from Negligible to High. The sensitivity and significance of the receptor is also described on an ordinal scale from Negligible to High.

The placement of the general description of the effect, and the sensitivity/significance of the receptor on this scale is determined by a Competent Person (a qualified ecologist in this case) as they interpret the qualities of the effect from the categories listed in Figure 3-1 and the receptors sensitivity and significance. Level of significance, also described as value of the receptor is previously set out in sub-section 3.8 above. Sensitivity of the receptor is assessed by the Competent Person based on the receptor's characteristics and how susceptible to impact they are from the type of effect.

The overall significance of an effect is then categorised into one of the following seven classifications:

- Imperceptible
- Not Significant
- Slight
- Moderate
- Significant
- Very Significant
- Profound

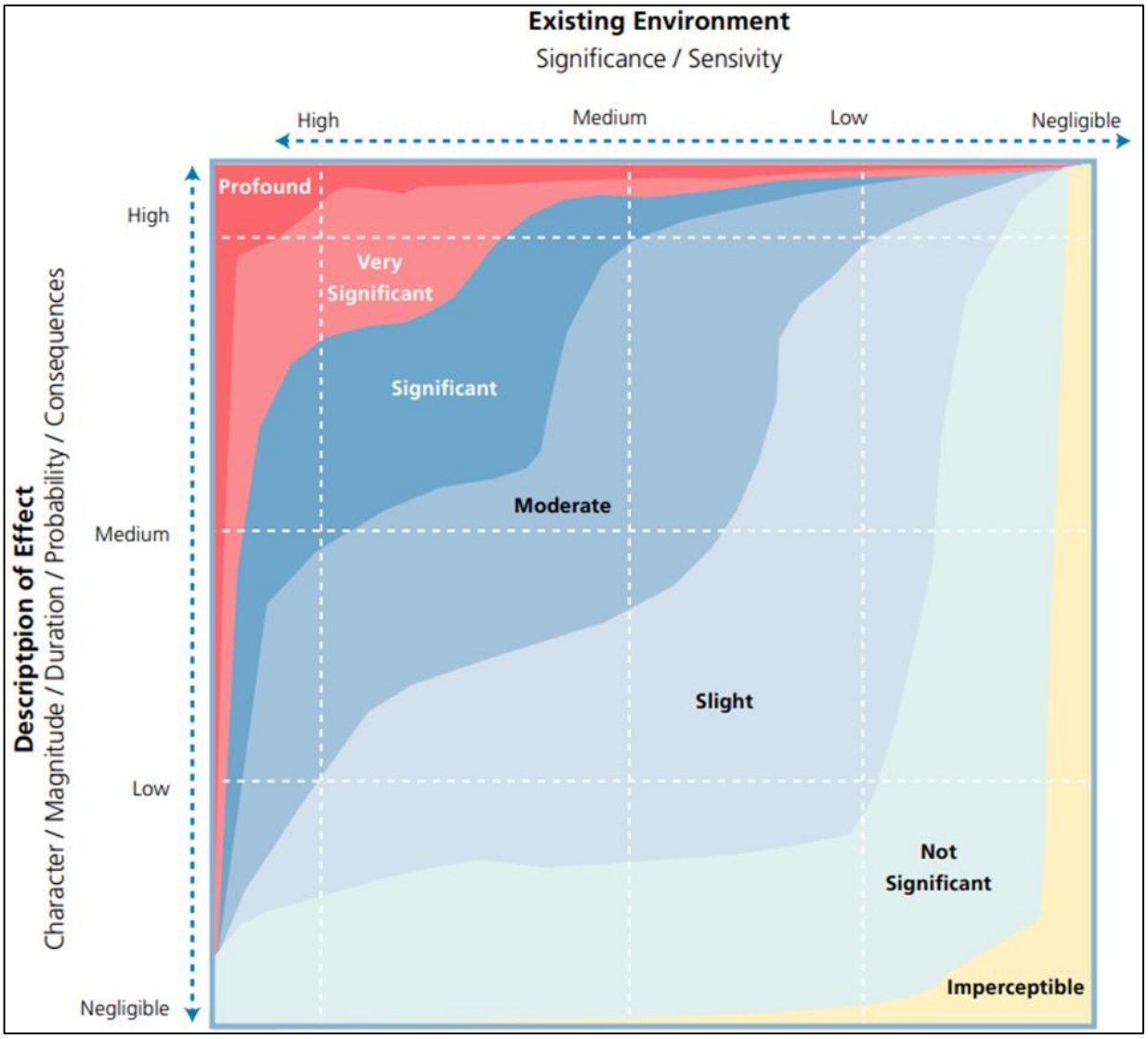


Figure 3-1: Chart showing the typical classifications of the significance of effects (EPA, 2022)

This chart has been interpreted in Table 3-4 below as a significance of impacts matrix. The scale has been ordered into an upper and lower bound for each qualitative category, so that degrees of significance within subcategories can be interpreted by the Competent Person. As Table 3-4 frames the significance of effects a as a defined categorical scale rather than a sliding gradient as is shown in the EPA guidance, it is intended to be used as an initial reference resource, rather than definitive method of assigning impacts.

Table 3-4: Simplified Significance of Effects matrix

Magnitude of impact	• Sensitivity/ Value of Receptor							
	High +	**High -**	**Medium +**	**Medium -**	**Low +**	**Low -**	**Negligible +**	**Negligible -**
High +	Profound	Very Significant	Very Significant	Significant	Moderate	Moderate	Not Significant	Imperceptible
High -	Very Significant	Very Significant	Significant	Moderate	Moderate	Slight	Not Significant	Imperceptible
Medium +	Very Significant	Significant	Moderate	Moderate	Slight	Slight	Not Significant	Imperceptible
Medium -	Significant	Moderate	Moderate	Moderate	Slight	Slight	Not Significant	Imperceptible
Low +	Moderate	Slight	Slight	Slight	Slight	Slight	Not Significant	Imperceptible
Low -	Slight	Slight	Slight	Slight	Slight	Not Significant	Not Significant	Imperceptible
Negligible +	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant	Imperceptible
Negligible -	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant	Imperceptible	Imperceptible	Imperceptible

3.8.3 Residual Impacts

The project is assessed including some designed-in mitigation (e.g., appropriate drainage design). This is done where mitigation is proven to be effective and will be implemented effectively with a high certainty. Where significant residual impacts are still identified, further mitigation measures will be proposed as part of the EcIA process to avoid, reduce or minimise them. Each impact assessment section assigns a final significance level to the impact described, which considers and includes the implementation of any stated mitigation measures; these are the residual impacts.

3.9 Cumulative Impacts

Potential sources of cumulative impacts were identified based on the ecology of valued ecological features. Potential sources of cumulative impacts were sought within an area where there is the potential for a significant impact on a site or species. The plans and projects identified as potential sources of cumulative impacts are described in Section 5.

3.10 Limitations and Constraints

This EcIA is based on ecological site surveys and existing data from the above-mentioned sources. The report necessarily relies on some assumptions and is inevitably subject to some limitations. These do not affect the conclusion, but the following points are recorded in order to ensure the basis of the assessment is clear:

- Information on the works and conditions on site are based on current knowledge at the time of writing. Changes to the site since surveys were undertaken cannot be accounted for. However, the site surveys have followed CIEEM (2019) Advice note on the lifespan of ecological reports and surveys. Any changes to the proposed works will require an assessment by a suitably qualified ecologist to determine if re-assessment is required.
- Adverse weather can cause delays to the schedule and alter the timing of works. This has been accounted for using a worst-case scenario where possible.
- 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
- The precautionary principle is used at all times when determining potential ecological sensitivity of the site.

4 Baseline conditions

The baseline conditions presented here are informed by desk-based sources as detailed in Section 3. To inform this EcIA the initial baseline ecological site visit was performed by JBA Ecologists Patricia Byrne and Abbie Doyle on 07/05/2026.

4.1 Desk-based Assessment

4.1.1 Designated Sites

This section lists the designated sites of International and National importance. Within the ZoI for this project, five Natura 2000 sites were recorded and their potential links to the site examined (Table 4-1 and Figure 4-1). Site briefs; QIs / SCIs; and project-relevant threats /pressures and their impacts and sources to the Natura 2000 sites within the ZoI are given in Table 4-2.

Table 4-1 Natura 2000 sites within ZoI of the proposed site

Natura 2000 site	Site Code	Approximate distance from site	Hydrological distance from site
North Bull Island SPA	004006	8.5km	11.6km indirect connection via surface and groundwater pathways
North Dublin Bay SAC	000206	8.5km	11.6km indirect connection via surface and groundwater pathways
North-West Irish Sea SPA	004236	8.6km	12.4km indirect connection via surface and groundwater pathways
South Dublin Bay SAC	000210	3.8km	10.5km indirect connection via surface and groundwater pathways
South Dublin Bay and River Tolka Estuary SPA	004024	3.6km	9.8km indirect connection via surface and groundwater pathways

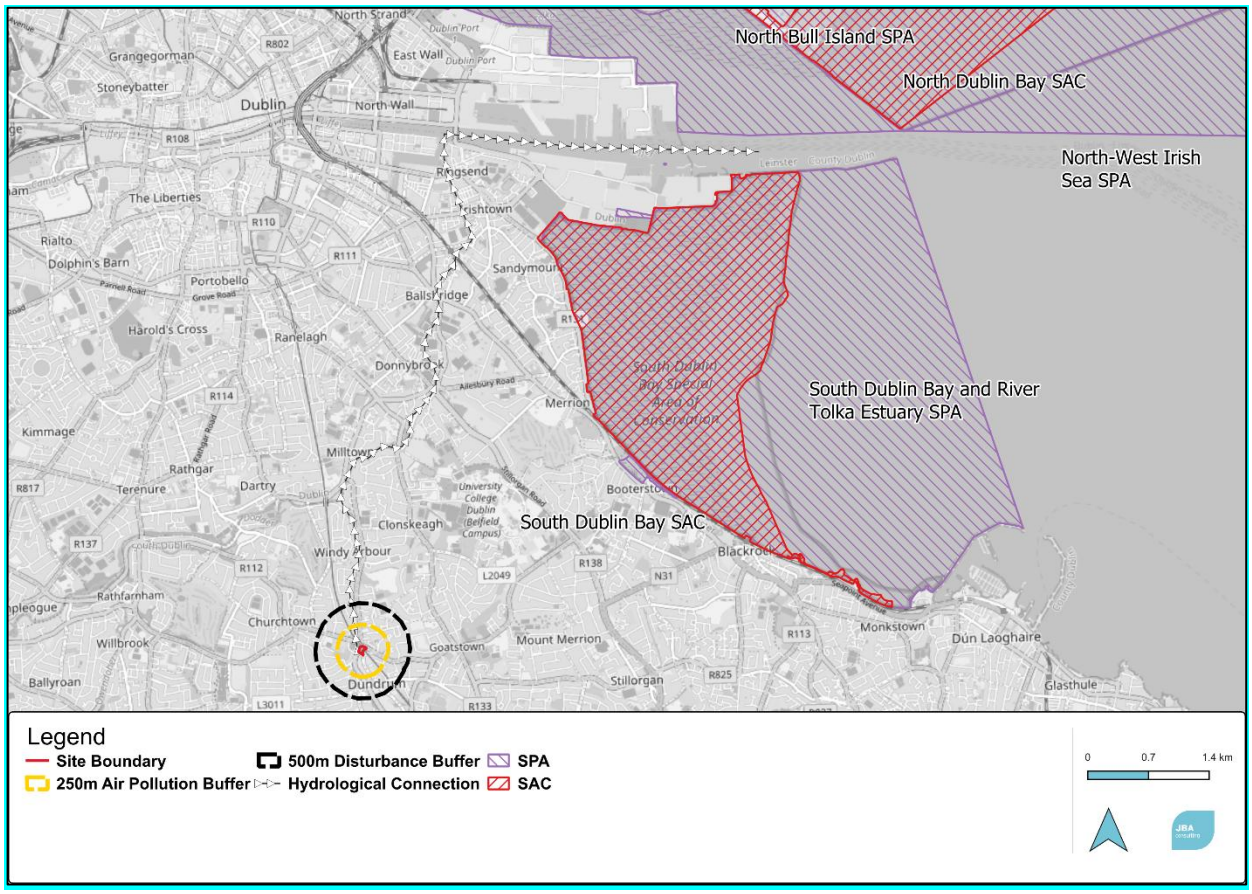


Figure 4-1: Natura 2000 sites within ZoI of the proposed project (©OSM, 2026)

Table 4-2: Site briefs; QIs / SCIs; and project-relevant threats /pressures and their impacts and sources to the Natura 2000 sites within the ZoI

Site Name	Brief	QIs / SCIs	Project-relevant Threats / Pressures: Impact (Source)
North Bull Island SPA (004006)	The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port. The site is among the top ten sites for wintering waterfowl in the country. It supports internationally important populations of Brent Goose and Bar-tailed Godwit and is the top site in the country for both of these species. A further 14 species have populations of national importance, with particular notable numbers of Shelduck, Pintail, Grey Plover, and Red Knot. The SPA is a regular site for passage waders such as Ruff, Curlew Sandpiper and Spotted Redshank. The site supports Short-eared Owl in winter (NPWS, 2014a).	- Light-bellied Brent Goose (Branta bernicla hrota) [A046] - Shelduck (Tadorna tadorna) [A048] - Teal (Anas crecca) [A052] - Pintail (Anas acuta) [A054] - Oystercatcher (Haematopus ostralegus) [A130] - Golden Plover (Pluvialis apricaria) [A140] - Grey Plover (Pluvialis squatarola) [A141] - Knot (Calidris canutus) [A143] - Sanderling (Calidris alba) [A144] - Dunlin (Calidris alpina) [A149] - Black-tailed Godwit (Limosa limosa) [A156] - Bar-tailed Godwit (Limosa lapponica) [A157] - Curlew (Numenius arquata) [A160] - Redshank (Tringa totanus) [A162] - Turnstone (Arenaria interpres) [A169] - Black-headed Gull (Chroicocephalus ridibundus) [A179] - Shoveler (Spatula clypeata)	Roads, motorways: Moderate impact (outside) Continuous urbanisation: Moderate impact (outside) Industrial or commercial areas: Moderate impact (outside) Discharges: Moderate impact (both) (EEA, 2024a)

Site Name	Brief	QIs / SCIs	Project-relevant Threats / Pressures: Impact (Source)
		[A857] - Wetland and Waterbirds [A999] (NPWS, 2015a)	
North Dublin Bay SAC (000206)	The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. The seaward side of the island has a fine sandy beach. A substantial area of shallow marine water is included in the site. The interior of the island is excluded from the site as it has been converted to golf courses. Nature conservation is a main land use within the site. The North Bull Island dune system is one of the most important systems on the east coast and is one of the few in Ireland that is actively accreting. It possesses extensive and mostly good quality examples of embryonic, shifting marram and fixed dunes, as well as excellent examples of humid dune slacks. Both Atlantic and Mediterranean salt marshes are well represented, and a particularly good marsh zonation is shown. The salt marshes grade into mudflats and sandflats, some of which are dominated by annual *Salicornia* species. Petalwort *Petalophyllum ralfsii* occurs at its only known station away from the western seaboard (NPWS, 2013a).	- Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - Salicornia and other annuals colonising mud and sand [1310] - Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] - Mediterranean salt meadows (Juncetalia maritimi) [1410] - Embryonic shifting dunes [2110] - Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] - Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] - Humid dune slacks [2190] - Petalophyllum ralfsii (Petalwort) [1395] (NPWS, 2013b)	Urbanised areas, human habitation: High impact (outside) Industrial or commercial areas: High impact (outside) (EEA, 2024b)
North-west Irish Sea SPA (004236)	The North-west Irish Sea SPA constitutes an important resource for marine birds. The estuaries and bays that open into it along with connecting coastal stretches of intertidal and shallow subtidal habitats, provide safe feeding and roosting habitats	- Red-throated Diver Gavia stellata [A001] - Great Northern Diver Gavia immer [A003] - Fulmar Fulmarus glacialis [A009]	EEA List of Threats and Pressures not yet published

Site Name	Brief	QIs / SCIs	Project-relevant Threats / Pressures: Impact (Source)
	for waterbirds throughout the winter and migration periods. These areas, along with more pelagic marine waters further offshore, provide additional supporting habitats (for foraging and other maintenance behaviours) for those seabirds that breed at colonies on the North-west Irish Sea's islands and coastal headlands. These marine areas are also important for seabirds outside the breeding period. This SPA extends offshore along the coasts of counties Louth, Meath and Dublin, and is approximately 2,333km2 in area. This SPA is ecologically connected to several existing SPAs in this area (NPWS, 2023a)	- Manx Shearwater Puffinus puffinus [A013] - Cormorant Phalacrocorax carbo [A017] - Shag Phalacrocorax aristotelis [A018] - Common Scoter Melanitta nigra [A065] - Little Gull Larus minutus [A177] - Black-headed Gull Chroicocephalus ridibundus [A179] - Common Gull Larus canus [A182] - Lesser Black-backed Gull Larus fuscus[A183] - Herring Gull Larus argentatus [A184] - Great Black-backed Gull Larus marinus [A187] - Kittiwake Rissa tridactyla [A188] - Roseate Tern Sterna dougallii [A192] - Common Tern Sterna hirundo [A193] - Arctic Tern Sterna paradisaea [A194] - Little Tern Sterna albifrons [A195] - Guillemot Uria aalge [A199] - Razorbill Alca torda [A200] - Puffin Fratercula arctica [A204] (NPWS, 2023b).	

Site Name	Brief	QIs / SCIs	Project-relevant Threats / Pressures: Impact (Source)
South Dublin Bay SAC (000210)	This intertidal site extends from the South Wall at Dublin Port to the West Pier at Dun Laoghaire, a distance of c. 5 km. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. A number of small streams and drains flow into the site. The designated site possesses a fine and fairly extensive example of intertidal flats. Sediment type is predominantly sand, with muddy sands in the more sheltered areas. A typical macro-invertebrate faunal assemblage exists within the SAC. The SAC has the largest stand of Dwarf Eelgrass *Zostera nolti* on the east coast (NPWS, 2020).	- Mudflats and sandflats not covered by seawater at low tide [1140] - Annual vegetation of drift lines [1210] - Salicornia and other annuals colonising mud and sand [1310] - Embryonic shifting dunes [2110] (NPWS, 2026)	Industrial or commercial areas: High impact (outside) (EEA, 2024c)
South Dublin Bay and River Tolka Estuary SPA (004024)	This designated site comprises a substantial part of Dublin Bay. It includes virtually all of the intertidal area in the south bay, as well as much of the Tolka Estuary to the north of the River Liffey. The sands support the largest stand of Dwarf Eelgrass on the east coast of Ireland. Sediments in the Tolka Estuary vary from soft thixotropic muds with a high organic content in the inner estuary to exposed, well aerated sands off the Bull Wall. The site regularly has an internationally important population of Brent Geese, which feeds on Dwarf Eelgrass in the autumn. It has nationally important numbers of a further 6 species including: Oystercatcher, Ringed Plover, Red Knot, Sanderling, Dunlin and Bar-tailed Godwit. It is an important site for wintering gulls, especially Black-headed Gull and Common Gull. Is a regular autumn	- Light-bellied Brent Goose *Branta bernicla hrota* [A046] - Eurasian Oystercatcher *Haematopus ostralegus* [A130] - Ringed Plover *Charadrius hiaticula* [A137] - Grey Plover *Pluvialis squatarola* [A141] - Red Knot *Calidris canutus* [A143] - Sanderling *Calidris alba* [A144] - Dunlin *Calidris alpina* [A149] - Bar-tailed Godwit *Limosa lapponica* [A157] - Common Redshank *Tringa totanus* [A162] - Black-headed Gull *Chroicocephalus ridibundus* [A179]	Urbanised areas, human habitation: High impact (Outside) Road, motorways: Medium impact (Outside) Industrial or commercial areas: High Impact (Outside) (EEA, 2024d)

Site Name	Brief	QIs / SCIs	Project-relevant Threats / Pressures: Impact (Source)
	roosting ground for significant numbers of terns, including Roseate Terns, Common Tern and Artic Tern (NPWS, 2015b).	- Roseate Tern *Sterna dougallii* [A192] - Common Tern *Sterna hirundo* [A193] - Arctic Tern *Sterna paradisaea* [A194] - Wetland and Waterbirds [A999] (NPWS, 2015c)	

In addition to the Natura 2000 sites, the non-statutory sites within the Source-Pathway-Receptor model were examined (Table 4-3). Non-statutory sites include proposed and existing Natural Heritage Areas, sites which are considered of significance for wildlife and habitats. Three pNHAs were identified to be within the Source-Pathway-Receptor Model: Dolphins, Dublin Docks pNHA, North Dublin Bay pNHA, and South Dublin Bay pNHA (see Figure 4-2).

Site descriptions and their respective ecological features of these non-statutory sites are listed in Table 4-4

Table 4-3: Proposed Natural Heritage Areas within the Source-Pathway-Receptor model.

Site Name	Site Code	Direct Distance from Site	Hydrological Distance
Dolphins, Dublin Docks, pNHA	000201	6.4km	9.2km
North Dublin Bay pNHA	000206	7.1km	10.6km
South Dublin Bay pNHA	000210	3.7km	10.6km

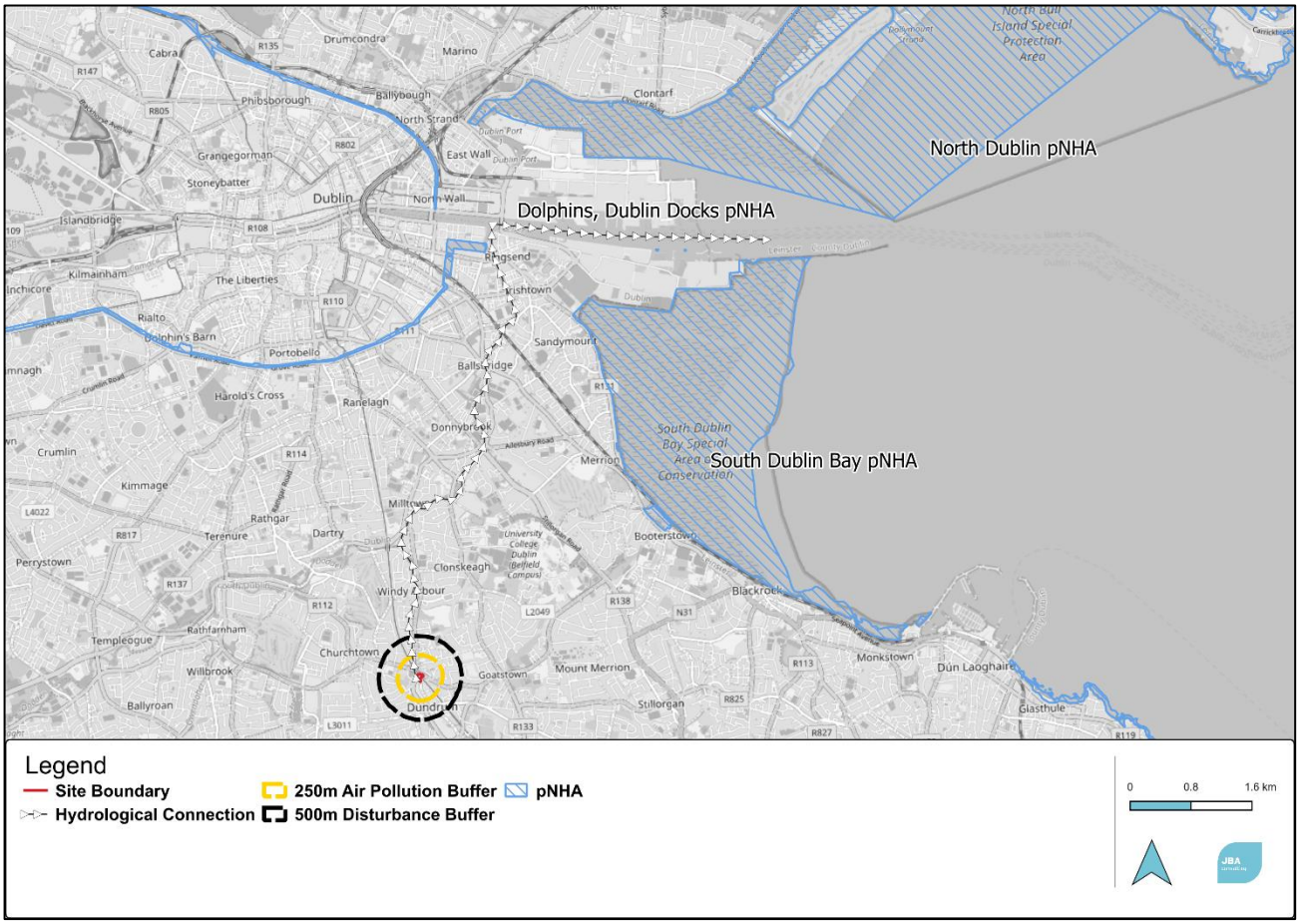


Figure 4-2: pNHA designated sites within the ZoI of the site works (©OSM, 2026)

Table 4-4: Site briefs and ecological features of conservation concern of the proposed Natural Heritage Areas within the ZoI

Site Name	Brief	Ecological Features of Interest
Dolphins, Dublin Docks pNHA (000201)	Same as South Dublin Bay and River Tolka SPA	**Fauna** Common Tern *Sterna hirundo* Arctic Tern *Sterna paradisaea*
North Dublin Bay pNHA (000206)	Same as North Dublin Bay SAC	**Fauna** Common Goldeneye *Bucephala clangula* Common Gull *Larus canus* Eurasian Wigeon *Mareca Penelope* Great Cormorant *Phalacrocorax carbo* Herring Gull *Larus argentatus* Irish Hare *Lepus timidus hibernicus* Little Egret *Egretta garzetta* Mallard *Anas platyrhynchos* Meadow Pipit *Anthus pratensis* Red-breasted Merganser *Mergus serrator* Ringed Plover *Charadrius hiaticula* Skylark *Alauda arvensis* **Flora** Bee Orchid *Ophrys apifera* Lesser Centaury *Centaurium pulchellum* Meadow Saxifrage *Saxifraga granulata* Petalwort *Petalophyllum ralfsii* Red Hemp-nettle *Galeopsis angustifolia* Spring Vetch *Vicia lathyroides* Wild Clary/Sage *Salvia verbenaca*
South Dublin Bay pNHA (000210)	Same as South Dublin Bay SAC	**Fauna** Bar-tailed Godwit *Limosa lapponica* Black-headed Gull *Chroicocephalus*

Site Name	Brief	Ecological Features of Interest
		ridibundus Common Gull *Larus canus* Eurasian Curlew *Numenius arquata* Herring Gull *Larus argentatus* Great Crested Grebe *Podiceps cristatus* Little Egret *Egretta garzetta* Mediterranean Gull *Larus melanocephalus* Turnstone *Arenaria interpres*

4.1.2 Screening of Designated Sites

An AA Screening has been carried out for this project by JBA (2026). Following initial screening, and based upon best scientific judgement it is concluded that **likely significant effects are not anticipated** from the project on any of the Natura 2000 sites within the project's ZoI due to the nature and scale of the project, the large distance of any direct or indirect hydrological connection, and the direct distance between the project site and these Natura 2000 sites:

- North Bull Island SPA
- North Dublin Bay SAC
- North-West Irish Sea SPA
- South Dublin Bay SAC
- South Dublin Bay and River Tolka Estuary SPA

The pNHA sites below are being screened out due to the following: overlap with screened out Natura 2000 sites, distance from the proposed site and the scale of the proposed works (capacity for dust and silt generation):

- Dolphins, Dublin Docks pNHA
- North Dublin Bay pNHA
- South Dublin Bay pNHA

4.1.3 Protected Species

National Biodiversity Data Centre (NBDC)

Records of protected flora and fauna including invertebrates, amphibians, reptiles, fish, birds and mammals collated from the NBDC (2026) database, present within the surrounding 2km within the past 10 years are listed in Appendix E.1. This list includes their level of protection, if they are red or amber listed on the IUCN Red List or the Birds of Conservation Concern in Ireland (2020-2026) and the date of the last record of this species at this location.

NPWS Data

A search of the NPWS ecological records within 2km of the site within the last 10 years was conducted. No protected floral, faunal, or habitats were identified during this search within the vicinity of the site (NPWS, 2026).

4.1.4 Invasive Non-Native Species (INNS)

Certain invasive non-native animals and plants are listed under the First Schedule of the European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374/2024) and the Commission Implementing Regulation (EU) 2025/1422 update. This makes it an offence to release, plant them in the wild or cause them to disperse, spread or otherwise cause them to

grow. If these species occur on a site proposed for development or other work which may disturb the ground, control of these species is likely to be required.

European Council's Regulation on the prevention and management of the introduction and spread of invasive alien species [2025/1422] sets out to prevent, minimise and mitigate the adverse impacts of the introduction and spread, both intentional and unintentional, of invasive alien species on biodiversity and the related ecosystem services as well as on human health and the economy.

Table 4-5 below provides a list of INNS recorded within 2km of the site (NBDC, 2026) that are listed on the First Schedule of the European Union (Invasive Alien Species) Regulations 2024 (S.I. No. 374/2024; 2025/1422), and their approximate distance from the site. For a full list of INNS recorded within 2km of the site, see Appendix E.2.

Table 4-5: INNS recorded within or immediately adjacent to the site of proposed works

INNS	Impact	Regulation S.I. 374/2024, 2025/1422
Himalayan Balsam *Impatiens glandulifera*	High Impact	Regulation S.I. 374/2024
Japanese Knotweed *Fallopia japonica*	High Impact	Regulation S.I. 374/2024
Spanish Bluebell *Hyacinthoides hispanica*	-	Regulation S.I. 374/2024
Three-cornered Garlic *Allium triquetrum*	Medium Impact	Regulation S.I. 374/2024
Harlequin Ladybird *Harmonia axyridis*	High Impact	Regulation S.I. 374/2024
Zebra Mussel *Dreissena polymorpha*	High Impact	Regulation S.I. 374/2024
American Mink *Neovison vison*	High Impact	Regulation S.I. 374/2024
Grey Squirrel *Sciurus carolinensis*	High Impact	Regulation S.I. 374/2024

4.2 Water Framework Directive

4.2.1 Surface Water Status

The proposed site lies within the Water Framework Directive (WFD) Dodder_SC_010 sub-catchment, within the WFD Liffey and Dublin Bay catchment (EPA, 2026). The nearest watercourse is the Slang River (DODDER_050), located approximately 18m west, is a tributary of the River Dodder, and flows northwards before entering the transitional waterbody Liffey Estuary Lower and subsequently Dublin Bay coastal waterbody and the associated Natura 2000 sites. This river is under pressure from urban runoff and wastewater. The Slang River and River Dodder have a WFD status (2019-2024) of 'Moderate' and they are currently 'At Risk' of not meeting their WFD targets. The Liffey Estuary Lower is classed as 'Moderate' and is 'At Risk' of not meeting its WFD targets (EPA, 2026). Table 4-6 and Figure 4-3 show the surface waterbodies within the vicinity of the site and their respective WFD status (2019-2024) and risk status.

Table 4-6: The WFD waterbodies within ZoI of the proposed works

WFD Waterbody	WFD Status (2019-2024)	Risk Status
Dodder_050	Moderate	At Risk
Dublin Bay	Good	Not at Risk
Liffey Estuary Lower	Moderate	At Risk

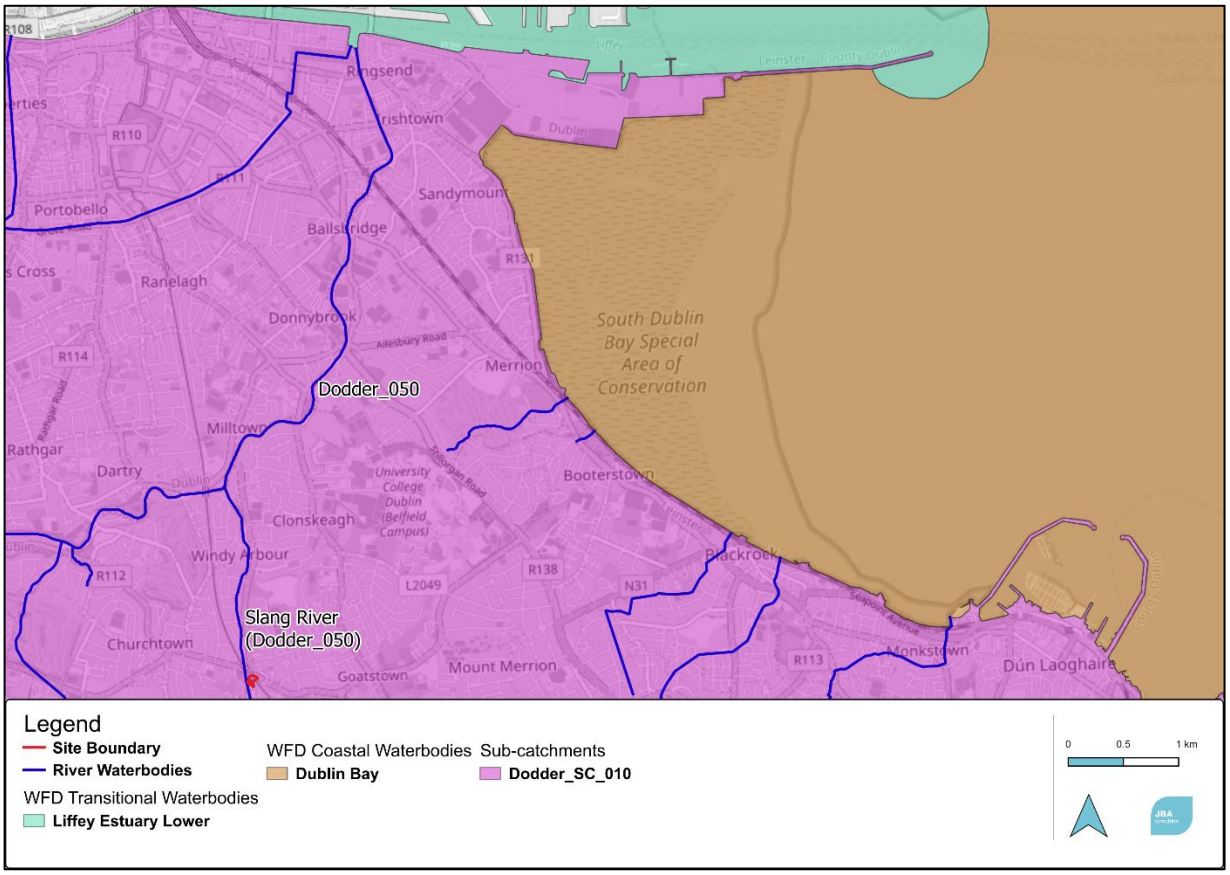


Figure 4-3: Sub-catchments and the local watercourses (©OSM, 2026)

4.2.2 Groundwater

The entirety of the site is located within the Kilcullen (IE_EA_G_003) groundwater body (Figure 4-4). The Kilcullen groundwater body currently has a 'Good' status (2019-2024) and is currently 'At Risk' of not meeting its WFD targets (EPA, 2026). The bedrock underlying the site is dominated by granite with microline phenocrysts from the Caledonian.

The underlying aquifer vulnerability for the majority of the site is 'Moderate', with a small section of the north-western section of the site where the aquifer vulnerability is 'Low'. The surrounding area to the north of the proposed development has predominantly 'Low' vulnerability, with a combination of 'Moderate', 'High', and 'Extreme' aquifer vulnerability in the surrounding area to the east, west and south of the proposed development (Figure 4-5). The aquifer within the underlying bedrock is considered to be a poor bedrock aquifer, which is moderately productive only in local zones (GSI, 2026). This aquifer has few and poorly connected fractures, fissures and joints, with only limited zones of higher permeability and poor storage capacity. Due to the low permeability and poor storage capacity, the aquifer has a low recharge acceptance and is capable of supplying moderate to low yields (<100 m3/d).

There are no Groundwater Zone of Contribution sites listed by the EPA near the development site, but there is groundwater abstraction in the area under Article 7 for drinking water.

The site's subsoil permeability is rated as low. This low-permeability subsoil means that only limited infiltration to groundwater is expected, with most rainfall likely to remain as surface water or move slowly through the shallow subsurface. Where infiltration does occur, it will enter a poor aquifer which is only moderately productive in local zones with low to moderate vulnerability, allowing groundwater to migrate towards the nearby Slang River. As such, a ground-to-surface water connection exists between the site and the Slang River.

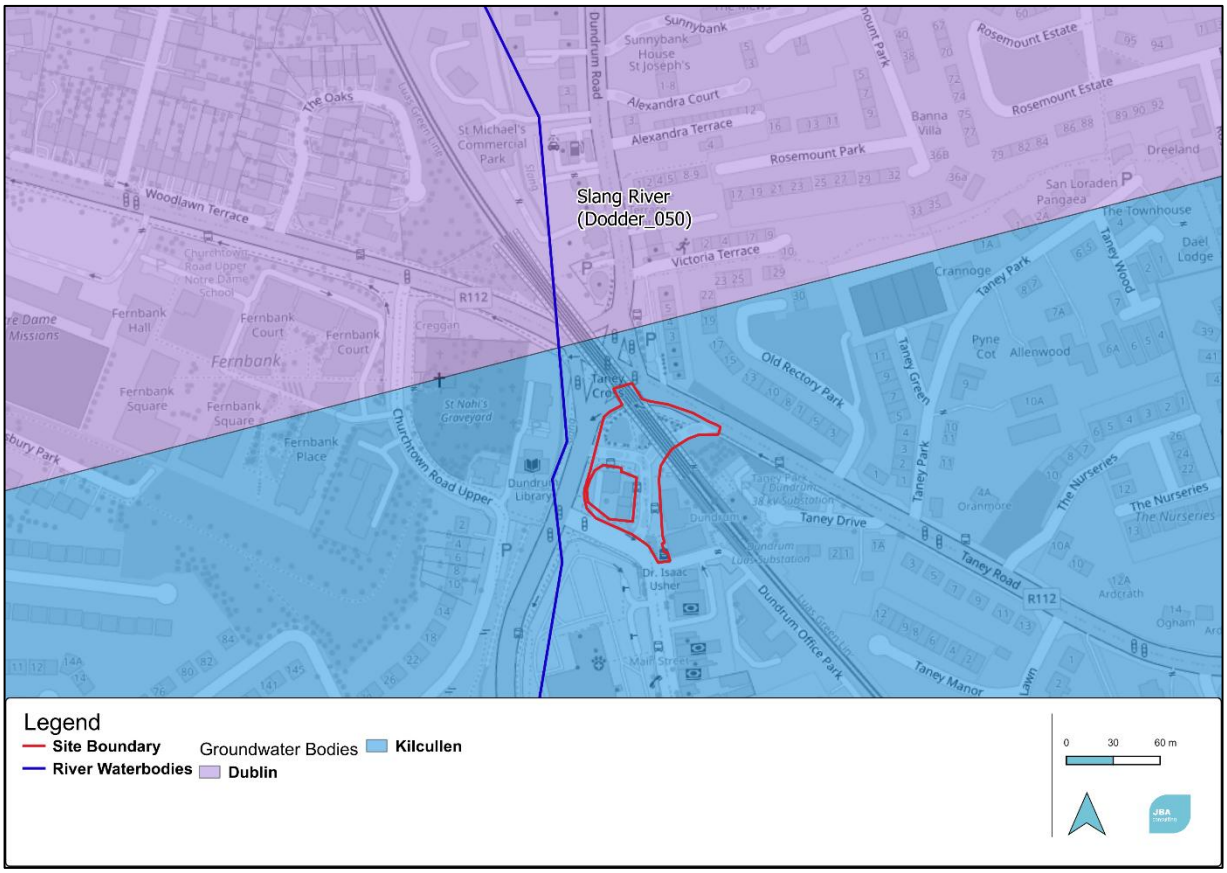


Figure 4-4: Groundwater bodies within the locality of the site (©OSM, 2026)

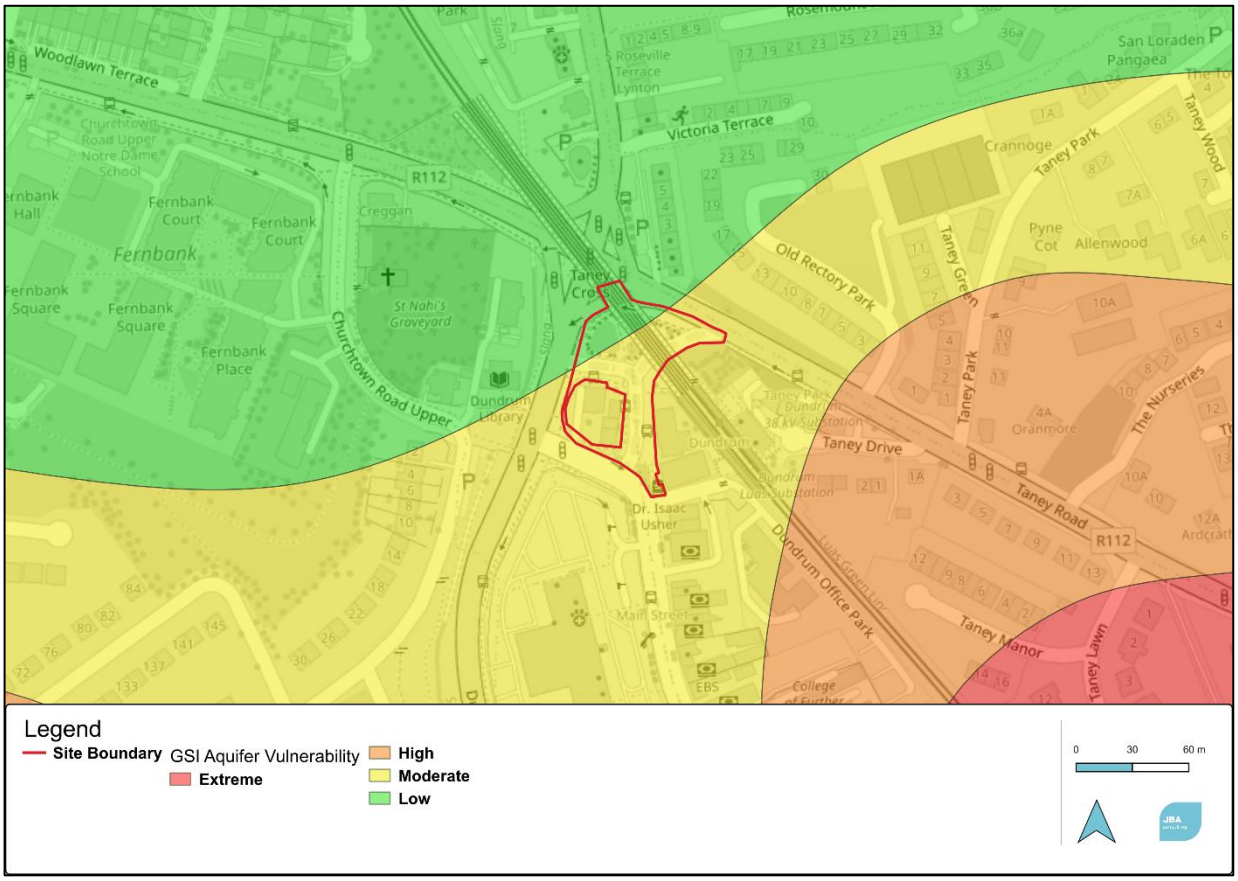


Figure 4-5: Groundwater vulnerability on site and in the local area (©OSM, 2026)

4.3 Site Visit

The ecological walkover survey was conducted on 07/05/2026 by JBA Ecologists Patricia Byrne and Abbie Doyle. The habitats and species recorded during the site visit are presented in detail in the following sections.

4.4 Habitats

The habitats recorded during the site survey are listed below in Table 4-7. These are mapped in Figure 4-6 and described in the sections below.

Table 4-7: Habitats recorded during the site visit

Fossitt Code	Fossitt Habitat
BL1	Stonewalls and other stoneworks
BL3	Buildings and artificial surfaces
GA2	Amenity grassland (improved)
GA2 / ED2	Mosaic: Amenity grassland (improved) / Spoil and bare ground
GA2 / WS3	Mosaic: Amenity grassland (improved) / Ornamental/non-native shrub
GS2	Dry meadows and grassy verges
WL1	Hedgerows
WL2	Treelines
WS3	Ornamental/non-native shrub
FW2	Depositing/lowland rivers

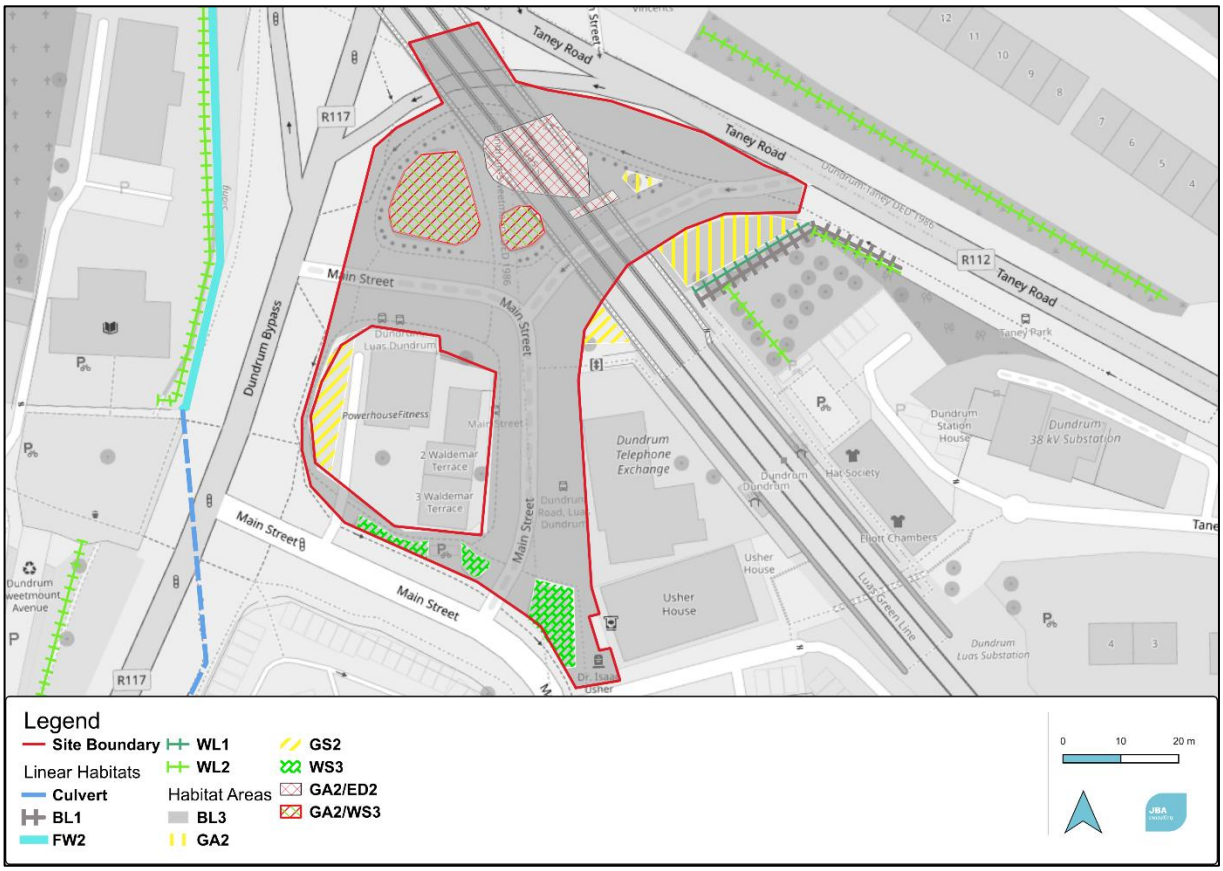


Figure 4-6: Habitats recorded on site classified by Fossitt (2000) (OSM, 2026)

4.4.1 Stonewalls and other stonework (BL1)

A stone wall occurs along the north-eastern boundary of the site, running parallel to the adjoining hedgerow. The wall is approximately 1m in height and continues eastwards along the pathway adjacent to Taney Road. No species were observed within this habitat.

Given the lack of floral diversity within this habitat, it provides local fauna with minimal foraging resources. Therefore, this habitat is considered to be of **less than local ecological importance**.

4.4.2 Buildings and artificial surfaces (BL3)

The site is predominantly composed of buildings and artificial surface habitat, including Main Street and its associated pedestrian and cyclist pathways (Figure 4-7). The site is bordered to the north by Taney Road and to the west by the Dundrum Bypass. No species were recorded within this habitat.

Given the lack of floral diversity within this habitat, it provides local fauna with minimal foraging resources. Therefore, this habitat is considered to be of **less than local ecological importance**.



Figure 4-7: Artificial surfaces dominating the site

4.4.3 Amenity grassland (improved) (GA2)

An area of amenity grassland was recorded adjacent to the north-eastern boundary of the site, situated on a steep bank adjacent to the hedgerow (Figure 4-8). A second, smaller patch of amenity grassland occurs north-west of this bank. Flora species recorded within this habitat included Black Medick *Medicago lupulina*, Dandelion species *Taraxacum* sp., Germander Speedwell *Veronica chamaedrys*, Meadow Buttercup *Ranunculus acris*, Moss, Perennial Ryegrass *Lolium perenne,* Red Clover *Trifolium pratense*, Ribwort Plantain *Plantago lanceolata*, Sedge *Carex* spp., and Vetch species *Vicia* spp. A Field Maple *Acer campestre* was also recorded within the smaller grassland area.

Bird species Jackdaw *Corvus monedula* and Magpie *Pica pica* were also recorded within this habitat.

This habitat has foraging resources for local fauna. However, as this habitat is managed, regularly mown, small scale and surrounded by busy road infrastructure, these resources are limited in nature. Therefore, this habitat is considered to be of **low local ecological importance**.



Figure 4-8: Steep bank in the north-east section of the site containing amenity grassland

4.4.4 Mosaic: Amenity grassland (improved) / Spoil and bare ground (GA2/ED2)

A mosaic of amenity grassland and bare ground was recorded to the north of the site, located beneath the Luas bridge (Figure 4-9). This area consists of patches of grassland interspersed with bare ground of gravelly and pebbly substrate. A second, smaller linear patch of this habitat was identified south-east of the main area, also situated beneath the bridge.

The amenity grassland has potential foraging resources for local fauna, however, the area is small in scale, managed and regularly mown, and surrounded by busy road infrastructure. As such the foraging opportunities provided by this habitat for local fauna are limited. Therefore, this habitat is considered to be of **low local ecological importance**.



Figure 4-9: Amenity grassland and bare ground mosaic underneath the Luas bridge

4.4.5 Mosaic: Amenity grassland (improved / Ornamental/non-native shrub (GA2/WS3)

A mosaic of amenity grassland and ornamental/non-native shrub was recorded in the north-west of the site, with a smaller patch located just east of the main area (Figure 4-10). This habitat consists of improved amenity grassland interspersed with planted ornamental shrubs. Within the amenity grassland component, the flora species include Black Medick, Chamomile *Chamaemelum nobile*, Chickweed *Stellaria media*, Daisy *Bellis perennis*, Dandelion species, Dock species *Rumex* spp., Field Maple, Groundsel *Senecio vulgaris*, Hedge Mustard *Sisymbrium officinale*, Red Dead Nettle *Lamium purpureum*, Ribwort Plantain, and Yarrow *Achillea millefolium* were recorded.

Within the ornamental/non-native shrub component, *Alliums*, Black Medick, Cleavers *Galium aparine*, Creeping Buttercup *Ranunculus repens*, Heather *Calluna vulgaris*, Ivy *Hedera hibernica*, Meadow Buttercup, Red Clover, and Rough Hawk's-beard *Crepis biennis* were recorded. Tree species Birch *Betula pendula* and Cherry *Prunus avium* were also recorded within this component. Bee species were recorded in the area of flowering plants.

The invasive species Butterfly-bush *Buddleja davidii* and Old Mans Beard *Clematis vitalba* were also recorded within this mosaic habitat.

This habitat has foraging resources for local fauna however, this habitat is small in scale and surrounded by busy road infrastructure, meaning these resources are limited in nature. Therefore, this habitat is considered to be of **low local ecological importance**.



Figure 4-10: Amenity grassland and ornamental/non-native mosaic

4.4.6 Dry meadows and grassy verges (GS2)

A small section of dry meadows and grassy verges habitat was recorded along the eastern boundary of the site, situated just south of the Luas bridge (Figure 4-11). This area occurs on a steep bank, similar in gradient to the larger amenity grassland habitat. This area is not contained within the site boundary but is located adjacent to the eastern site boundary. Flora species recorded within this habitat included Black Medick, Cinquefoil *Potentilla* sp., Colt's-foot *Tussilago farfara*, Daisy, Dandelion species, Meadow foxtail *Alopecurus pratensis*, Perennial Ryegrass, Ragwort *Jacobaea vulgaris*, Red Clover, Ribwort Plantain, Rough Hawk's-beard, Silverweed *Potentilla anserina*, and Sycamore saplings *Acer pseudoplatanus*. Within this habitat, several small patches of exposed soil and soil holes were recorded, providing potential microhabitats for ground-nesting invertebrates including mining bees.

A second, larger area of this habitat was identified in the south-west of the site area. This patch is not contained within the site boundary but runs along the inner western boundary of the central void within the site. It supports the same flora composition as the smaller patch within the site.

Invasive Butterfly-bush was recorded within both areas of this habitat.

This habitat provides nesting and foraging resources for local terrestrial invertebrates, as well as foraging resources for all local fauna. Therefore, this habitat is considered to be of **high local importance**.



Figure 4-11: Small dry meadow bank along the eastern site boundary

4.4.7 Hedgerows (WL1)

No hedgerows were recorded within the site boundary.

A hedgerow was recorded along the north-eastern boundary of the site, positioned at the top of the steep bank of amenity grassland (Figure 4-12). The hedgerow is approximately 3m wide. The flora recorded within the hedgerow included Ash *Fraxinus excelsior*, Birch, Bramble *Rubus fructicosus*, Field Maple, Herb Robert *Geranium robertianum*, Ivy, and Willow *Salix cinerea*.

The invasive species Butterfly-bush, Cherry Laurel *Prunus laurocerasus*, Cotoneaster *Cotoneaster sternianus*, and Sycamore were also recorded within the hedgerow.

This habitat has nesting potential for breeding birds and terrestrial invertebrates. This habitat can also provide refugia and foraging resources for terrestrial mammals. Therefore, this habitat is considered to be of **high local ecological importance**



Figure 4-12: Hedgerow located at the top of the steep bank outside the north-east section of the site

4.4.8 Treelines (WL2)

No treelines were recorded within the site boundary.

Two small treelines were recorded just outside the north-eastern boundary, running perpendicular to the hedgerow. In addition, a long treeline was observed to the north and east of the site along Taney Road, while two further treelines were recorded to the west of the site along the Dundrum Bypass. Species recorded within these habitats included Ash, Elder *Sambucus nigra*, Field Maple, Hornbeam *Carpinus betulus*, and Ivy. Brome *Bromus* spp. and Nettle *Urtica dioica* were recorded within the understorey of the treelines.

The invasive species Butterfly-bush, Cotoneaster, Sycamore, and Winter Heliotrope *Petasites pyrenaicus* were also recorded within the treelines.

This habitat has nesting potential for breeding birds and terrestrial invertebrates as well as refugia and foraging material for terrestrial mammals. Therefore, this habitat is considered to be of **high local ecological importance** within the surrounding area.

4.4.9 Ornamental/non-native shrub (WS3)

Three small patches of ornamental/non-native shrub were recorded along the southern boundary of the site (Figure 4-13). These areas consisted of planted shrub beds containing a mix of ornamental species. Cherry *Prunus avium* and Hornbeam were present within these patches.

This habitat has foraging resources for local fauna. However, as this habitat is considered species diversity poor, small scale and surrounded by busy road infrastructure, these resources are limited in nature. Therefore, this habitat is considered to be of **low local ecological importance**.



Figure 4-13: Small area of planted ornamental/non-native shrub along the southern boundary of the site

4.4.10 Depositing/lowland rivers (FW2)

The River Slang flows approximately 18m west of the site boundary, running parallel to it (Figure 4-14). The river is separated from the site by a public road (Dundrum Bypass), pavement, and a low wall barrier, with the channel lying approximately 4m below road level.

This habitat has foraging and commuting resources for all local fauna and therefore is considered to be of **high local ecological importance**.



Figure 4-14: River Slang located 18m west of the site

4.5 Rare & Protected Flora

During a search of the NBDC records, no species listed on the Flora (Protection) Order 2022 were recorded within 2km of the site (NBDC, 2026).

The site is therefore considered of **less than local ecological importance for protected flora**.

4.6 Protected Fauna

4.6.1 Non-volant Mammals

There was no evidence of fauna species listed under the Wildlife Acts 1976-2021, the Wildlife (Amendment) Act 2023 or the EU Habitats Directive recorded by the JBA Ecologists during the ecological walkover survey. Mammals protected under the Wildlife Act that have been recorded under the NBDC within 2km of the site include:

- Badger *Meles meles*
- Hedgehog *Erinaceus europaeus*
- Otter *Lutra lutra*
- Pine Marten *Martes martes*

Due to the urban area of the site resulting in a lack of entrances and habitats on site, Badger and Pine Marten are unlikely to be utilising the site. While the Slang River 18m west of the site has the potential to support Otter, the 4m drop from the site level to the riverbank, and the busy road infrastructure separating the river and the site boundary, makes the presence of Otter within the site boundary highly unlikely. There is potential refugia and foraging resources within the hedgerow just outside of the site's eastern boundary and foraging resources within the grassland habitats within the site, making the site suitable for Hedgehog.

Therefore, in the context the site and the lands immediately adjacent area, the proposed site is considered to be of **high local ecological importance** for Hedgehog.

4.6.2 Bats

4.6.2.1 Desk Study

The historical records from the NBDC website (2026) revealed no bat species have been recorded within a 2km radius around the proposed site within the past 10 years (using a 2km custom polygon).

Additional species within the BATLAS Report 2020 (Pickett, 2019) indicated the presence of the following bat species within the 10km grid of the site:

- Common Pipistrelle *Pipistrellus pipistrellus sensu lato*
- Daubenton's Bat *Myotis daubentonii*
- Soprano Pipistrelle *Pipistrellus pygmaeus*

These records do not provide a certainty of the absence/presence of bats in these grid squares. Bat Conservation Ireland has provided a 'habitat suitability' index over the whole of Ireland. The western half of the proposed site is located within a square with a suitability index of 17.44, and the eastern half of the site is located within a square with a suitability index of 25.44, on a scale from 0-100 where 100 is the most favourable for bats.

Common Pipistrelle, Daubenton's Bat and Soprano Pipistrelle are protected under the Wildlife Acts 1976-2021, the Wildlife (Amendment) Act 2023 and the EU Habitats Directive.

4.6.2.2 Preliminary Bat Roost and Habitat Suitability Survey

A preliminary bat roost and habitat suitability survey was carried out during the site visit on 07/05/2026. No potential roosting features (PRF) were recorded within the site, including the buildings in the centre of the site and adjacent to the site. There are several mature trees within the treeline immediately outside of the site boundary, however, no PRFs were identified.

Therefore, the proposed site is considered to be of **less than local ecological importance** for roosting bats.

4.6.2.3 Bats – Foraging and Commuting

The hedgerow immediately east of the site, the Slang River, and treelines immediately outside of the site boundary to the east and west have high foraging and commuting potential for local bat species. The areas of dry meadows, amenity grassland and ornamental shrub habitats

within the site boundary also have foraging potential for local bat species but are small size and in the centre of a well-lit urban junction. Bats may commute above the busy junction of the R117 and R112 and Luas line, but the junction may also act as a barrier. Overall, the proposed site and environs is considered to be of **high local ecological importance** for commuting and foraging activities of local bat species, given the proximate location of adjacent foraging habitat.

4.6.3 Breeding and Wintering Birds

4.6.3.1 Desk Study

Due to the size and scale of the project, a 1km custom polygon of protected bird species from the NBDC records was analysed. Bird species within this list include 16 species of conservation concern. These species are listed below in Table 4-8 along with their protection status on the Birds of Conservation Concern Ireland (BoCCI) (Gilbert et al., 2021). The full NBDC record of protected species within 2km of the site are shown in Appendix E.1.

Table 4-8: Protected bird species recorded within NBDC records

Species	Birds of Conservation Concern Status (BOCCI)	EU Birds Directive Annex
Black-headed Gull *Chroicocephalus ridibundus*	Amber (B&W)	-
Goldcrest *Regulus regulus*	Amber (B)	-
Greenfinch *Chloris chloris*	Amber (B)	-
Grey Wagtail *Motacilla cinerea*	Red (B)	-
Herring Gull *Larus argentatus*	Amber (B&W)	-
House Sparrow *Passer domesticus*	Amber (B)	-
Lesser Black-backed Gull *Larus fuscus*	Amber (B&W)	-
Mediterranean Gull *Ichthyaetus melanocephalus*	Amber (B)	Annex I
Oystercatcher *Haematopus ostralegus*	Red (B&W)	-

Species	Birds of Conservation Concern Status (BOCCI)	EU Birds Directive Annex
Red Kite *Milvus milvus*	Red (B)	Annex I
Redwing *Turdus iliacus*	Red (W)	-
Snowy Owl *Bubo scandiacus*	Red (W)	-
Spotted Flycatcher *Muscicapa striata*	Amber (B)	-
Starling *Sturnus vulgaris*	Amber (B)	-
Swallow *Hirundo rustica*	Amber (B)	-
Swift *Apus apus*	Red (B)	-
Designated category within BOCCI; B = Breeding, W = Wintering		

4.6.3.2 Site Visit

During the site visit on 07/05/2026, two bird species were identified, Jackdaw and Magpie. There is nesting potential within the hedgerow east of the site, even with the large presence of invasive species within the hedgerow such as Cherry Laurel and Butterfly Bush. The treelines outside the site boundary offer nesting resources for resident and migratory breeding birds.

The hedgerow and dry meadow habitat have foraging resources for breeding birds. Therefore, the proposed site is considered to be of **high local ecological importance** for resident breeding bird species.

The site provides limited foraging and refuge resources for wintering bird species. Therefore, the site is considered to be of **less than local ecological importance** for resident and migratory wintering bird species.

4.6.1 Fish

The River Slang is noted by Inland Fisheries Ireland (IFI) to be a 'Salmonid channel,' in an observation made to An Bord Pleanala for SHD 313220 in 2022 (IFI, 2022). The Slang River is directly connected to the Dodder River, which is an important salmonid river, and the channel functions as a nursery for the Dodder channel trout population. European Eel and Three-spine stickleback are likely to also occur in the channel (Sweeney 1991).

Therefore, in the context the site and the surrounding area, the proposed site is considered to be of **high local ecological importance** for fish species given the proximate location of the river.

4.6.2 Amphibians

There was no evidence of amphibian species listed under the Wildlife Acts 1976-2021, the Wildlife (Amendment) Act 2023 or the EU Habitats Directive recorded by the JBA Ecologists during the ecological walkover survey. Common Frog *Rana temporaria* and Smooth Newt *Lissotriton vulgaris* have been recorded within NBDC within 2 km of the site in the last 10 years, both of which are protected under the Wildlife Act.

During the site visit there was no evidence of any amphibian species present within the site or suitable supporting habitat within the site boundary. However, the Slang River 18m west of the site offers local amphibian species spawning opportunities.,

Therefore, in the context the site and the surrounding area, the proposed site is considered to be of **high local ecological importance** for this species group given the proximate location of the river.

4.6.3 Reptiles

There was no direct or indirect evidence of reptilian species, namely Common Lizard *Zootoca vivipara*, listed under the Wildlife Acts 1976-2021, the Wildlife (Amendment) Act 2023 or the EU Habitats.

Therefore, in the context the site and the surrounding area, the proposed site is considered to be of **less than local ecological importance** for this species group.

4.6.4 Terrestrial Invertebrates

During the ecological walkover, there was no invertebrate species listed under the Wildlife Acts 1976-2021, the Wildlife (Amendment) Act 2023 or the EU Habitats, recorded. The 'Near Threatened' Moss Carder Bee *Bombus muscorum* and Red-tailed Bumblebee *Bombus lapidarius*, the 'Vulnerable' Buffish Mining Bee *Andrena nigroaenea*, and the 'Regionally Extinct' Tawny Mining Bee *Andrena fulva*, were recorded within NBDC within 2km of the site in the last 10 years. Bee species were seen foraging within the flowering shrub and grassland areas. Potential nests/hives were recorded within the dry meadow bank habitat during the site visit. The hedgerow, treelines, amenity grassland, ornamental shrub and dry meadow habitats have foraging and commuting potential for local invertebrate species.

Therefore, in the context the site and the surrounding area, the proposed site is considered to be of **high local ecological importance** for this species group.

4.7 Invasives Non-native Species

The Third Schedule of the Birds and Natural Habitats Regulations 2011 (S.I No. 447/2011) and the First Schedule of the Invasive Alien Species (IAS) Regulations 2024 (S.I. No. 374/2024) contain specific provisions that govern control of listed invasive species.

It is an offence to release or allow to disperse or escape, to breed, propagate, import, transport, sell or advertise species listed on the First Schedule of the Invasive Alien Species Regulations or Third Schedule of the Birds and Natural Habitats Regulations without a Licence.

The Invasive Alien Species Regulation conveys the rules to prevent, minimise and mitigate the adverse impacts of the introduction and spread (both with and without intention) of IAS on biodiversity and the related ecosystem services, as well as other adverse impacts on human health or the economy

During the site visit, five invasive non-native species (INNS) were recorded within the vicinity of the site, i.e. Butterfly-bush, Cherry Laurel, Cotoneaster, Old Man's Beard and Sycamore. These species are medium impact species and are not listed on the First or Third Schedules. As such, no invasive species management plan is required for the proposed development. The low impact invasive species Winter Heliotrope was recorded within the treelines outside of the site boundary. This species is also not listed on the First or Third Schedules.



Figure 4-15: Butterfly-bush recorded within the amenity grassland and ornamental shrub

4.8 Ecological Features Considered for Further Assessment

The designated sites and ecological features identified during the desktop study and ecological surveys, that were deemed to require further examination within the impact assessment section, are listed in Table 4-9. Sites and features screened out are not considered further in this assessment. Designated sites and ecologically features screened that are not to be examined further are also listed, along with the rationale for their exclusion.

Table 4-9: Summary of ecological features requiring impact assessment

Designated Site / Ecological Feature	Value	Rationale for inclusion/exclusion
North Bull Island SPA	International	Excluded from impact assessment: While this site is connected to the site via hydrogeological – surface water pathways, due to the distance of this hydrological connection and the scale of the proposed development. This Natura 2000 site was screened out in the AA Screening
North Dublin Bay SAC	International	Excluded from impact assessment: While this site is connected to the site via hydrogeological – surface water pathways, due to the distance of this hydrological connection and the scale of the proposed development. This Natura 2000 site was screened out in the AA Screening
North-West Irish Sea SPA	International	Excluded from impact assessment: While this site is connected to the site via hydrogeological – surface water pathways, due to the distance of this hydrological connection and the scale of the proposed development. This Natura 2000 site was screened out in the AA Screening
South Dublin Bay SAC	International	Excluded from impact assessment: While this site is connected to the site via hydrogeological – surface water pathways, due to the distance of this hydrological connection and the scale of the proposed development. This Natura 2000 site was screened out in the AA Screening
South Dublin Bay and River Tolka Estuary SPA	International	Excluded from impact assessment: While this site is connected to the site via hydrogeological – surface water pathways, due to the distance of this hydrological connection and the scale of the proposed development. This Natura 2000 site was screened out in the AA Screening

Designated Site / Ecological Feature	Value	Rationale for inclusion/exclusion
Dolphins, Dublin Docks pNHA	National	Excluded from impact assessment: While this site is connected to the site via hydrogeological – surface water pathways, due to the distance of this hydrological connection and the scale of the proposed development.
North Dublin Bay pNHA	National	Excluded from impact assessment: While this site is connected to the site via hydrogeological – surface water pathways, due to the distance of this hydrological connection and the scale of the proposed development.
South Dublin Bay pNHA	National	Excluded from impact assessment: While this site is connected to the site via hydrogeological – surface water pathways, due to the distance of this hydrological connection and the scale of the proposed development.
Stonewalls and other stonework	Less than local	Excluded from impact assessment No flora present and no resources to support local fauna.
Buildings and artificial surfaces	Less than local	Excluded from impact assessment: No flora present and no resources to support local fauna.
Amenity grassland (improved)	Low local	Included in impact assessment This habitat has foraging potential for all local fauna.
Mosaic: Amenity grassland (improved) / Spoil and bare ground	Low local	Included in impact assessment This habitat has foraging potential for all local fauna.
Mosaic: Amenity grassland (improved) / Ornamental/non-native shrub	Low local	Included in impact assessment This habitat has foraging potential for all local fauna.
Dry meadows and grassy verges	High local	Included in impact assessment This habitat has nesting and foraging resources for local terrestrial invertebrates. This habitat has foraging resources for all local fauna.
Hedgerows	High local	Included in impact assessment This habitat has nesting potential for breeding birds and terrestrial invertebrates. This habitat has refugia and foraging resources for terrestrial mammals.

Designated Site / Ecological Feature	Value	Rationale for inclusion/exclusion
Treelines	High local	Included in impact assessment This habitat has nesting potential for breeding birds and terrestrial invertebrates. This habitat has refugia and foraging resources for terrestrial invertebrates.
Ornamental/non-native shrub	Low local	Included in impact assessment This habitat has foraging resources for all local fauna.
Depositing/lowland rivers	High local	Included in impact assessment This habitat has foraging and commuting resources for all local fauna.
Rare and Protected Flora	Less than local	Excluded from impact assessment: Excluded due to a lack of evidence of rare & protected flora within the site.
Non-volant Mammals (Hedgehog)	High local	Included in impact assessment The habitats present on site have foraging potential for non-volant species. The hedgerow and treeline habitats have refugia and commuting potential for Hedgehog.
Bats – Roosting	Less than local	Excluded from impact assessment: No roosting features were identified within the site boundary
Bats – Foraging and Commuting	High local	Included in impact assessment The habitats on site have some foraging potential for local bat species. The hedgerow, adjacent treelines and river habitats have high commuting and foraging potential for local bat species.
Breeding Birds	High local	Included in impact assessment The habitats on site have foraging potential for breeding bird species. The hedgerow offers nesting resources for breeding birds and terrestrial invertebrates. The treeline habitats offer nesting resources for breeding birds and terrestrial invertebrate species.
Wintering Birds	Less than local	Excluded from impact assessment The urban habitats on site offer limited foraging and refuge resources for wintering birds.
Fish	High local	Included in impact assessment The Slang River has suitable habitat for a number of fish species, and is classified as a 'salmonid channel by IFI

Designated Site / Ecological Feature	Value	Rationale for inclusion/exclusion
Amphibians	High local	Included in impact assessment Though no evidence of amphibians on site, or suitable supporting habitat. However the River Slang has spawning potential for local amphibians.
Reptiles	Less than local	Excluded from impact assessment No historical or present presence of reptiles within the site or surrounding areas.
Terrestrial Invertebrates	High local	Included in impact assessment The dry meadow bank has potential nests/hives for local terrestrial invertebrates. The habitats on site have foraging and commuting potential for local terrestrial invertebrate species.
Invasive Non-native Species	NA	Included in impact assessment Invasive species are anticipated to be disturbed as a result of the proposed development, which will increase their spread across the site, and as such must be considered within the impact assessment.

5 Other Relevant Plans and Projects

5.1 Cumulative Effects

5.2 As part of the impact assessment process, a cumulative assessment of the effects of the Proposed Development with the effects of other existing and / or approved projects is considered. The list of plans and projects are outlined belowPlans

The following projects or plans were identified as potential sources of cumulative effects:

- Dún Laoghaire Rathdown Council Development Plan 2022-2028;
- Dundrum Local Area Plan 2023;
- Greater Dublin Drainage Plan;
- River Basin Management Plan for Ireland 2022-2027

5.2.1 Dún Laoghaire Rathdown Council Development Plan 2022-2028

The County Development Plan (DLRCC, 2022a) has a vision and policy statement that aims to continue to facilitate appropriate levels of sustainable development predicated on the delivery of high quality community, employment and recreational environments - allied to the promotion of sustainable transportation and travel patterns - all the while protecting Dún Laoghaire–Rathdown's unique landscape, natural heritage and physical fabric, to ensure the needs of those living and working in the County can thrive in a socially, economically, environmentally sustainable and equitable manner.

An Appropriate Assessment Screening and an Appropriate Assessment Natura Impact Statement (NIS) was carried out on the plan. This concluded that there are no likely significant direct, indirect or secondary impacts of the project on any Natura 2000 sites (DLRCC, 2022b).

Overall, the Dún Laoghaire Rathdown Council Development Plan 2022-2028 is not considered to adversely impact any Natura 2000 site, nor is it expected to contribute to any cumulative or in-combination effects.

5.2.2 Dundrum Local Area Plan 2023

The Dundrum Local Area Plan aims to enhance Dundrum's role as a strategic employment centre while strengthening its function as a ten-minute neighbourhood. It prioritises the regeneration of under-used sites and historic buildings, including the Former Central Mental Hospital, the Old Shopping Centre, and other key locations such as the Council Carpark/Dom Marmion and Taney Cross. The plan seeks to deliver improved bus services and a new interchange, alongside enhanced active travel connections, traffic calming, and public realm upgrades along Main Street. It also promotes the creation of new green infrastructure, increased urban greening, and measures to enhance biodiversity, including along the Slang. Additional

objectives include providing new community, civic and cultural facilities, as well as delivering a modern, expanded library to meet the needs of the growing population.

5.2.3 Greater Dublin Drainage Plan

The Greater Dublin Drainage Strategy (2018) 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, 2024). 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 Clonshaugh, an orbital sewer and provision of an outfall pipe discharging 1km northeast 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 Q1 2021 and ultimate capacity of 2.4 million population equivalent to be in operation by 2025 (Irish Water, 2024).

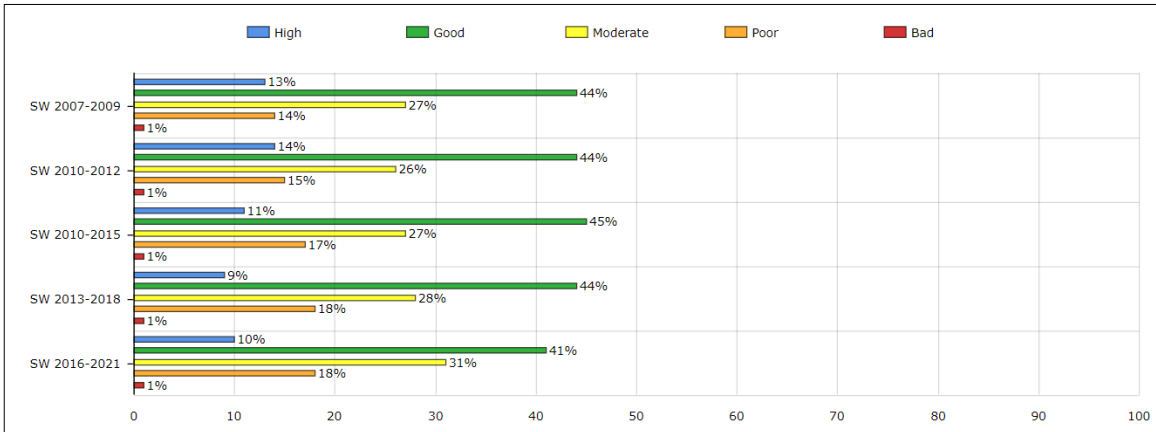
The Greater Dublin Drainage Project is strategically important to the Dublin Region in that it will provide capacity for residential and commercial growth (Uisce Éireann, 2025).

The Greater Dublin Drainage Plan is not anticipated to contribute to cumulative or in-combination effects in respect to the proposed works.

5.2.4 River Basin Management Plan for Ireland 2022-2027

Ireland's third River Basin Management Plan for Ireland - 'Water Action Plan 2024: A River Basin Management Plan' (DHLGH, 2024) sets out the measures that are necessary to protect and restore water quality in Ireland. The overall aim of the plan is to ensure that our natural waters are sustainably managed and that freshwater resources are protected so as to maintain and improve Ireland's water environment. The 3rd cycle Catchment Reports were published in 2024. The Catchment Reports provide a summary of the water quality assessment outcomes for respective catchments, including status and risk categories, significant threats and pressures, details on protected areas and a comparison between cycle 2 and cycle 3.

The third cycle Catchment Report for Liffey and Dublin Bay Catchment (EPA, 2024b) indicates that 42% of surface waterbodies were at 'good' or 'high' ecological status, and 86% of groundwater bodies were at 'good' status. The overall change in quality between Cycles 2 and 3 include 2 are mixed. There has been neither an increase or decrease in the number of rive waterbodies valued at "Poor" or "Bad" status, remaining at 18% between cycles. There is an increase of river waterbodies reaching a "High" status from 9% to 10%, there was also a decrease in waterbodies from "Good" to "Moderate" value by approximately 3% of river waterbodies (as seen in Figure 5-1). The main significant pressures are aquaculture, anthropogenic, atmospheric, historically polluted sites and waste pressures followed by agriculture, urban run-off and forestry.



Period	High	Good	Moderate	Poor	Bad
SW 2007-2009	13%	44%	27%	14%	1%
SW 2010-2012	14%	44%	26%	15%	1%
SW 2010-2015	11%	45%	27%	17%	1%
SW 2013-2018	9%	44%	28%	18%	1%
SW 2016-2021	10%	41%	31%	18%	1%

Figure 5-1: Changes in quality of river waterbodies in the Liffey and Dublin Bay catchment since 2007 (EPA, 2024)

5.3 Other Planning Applications

A search of planning applications that have been made in the last three years and within 2km of the proposed project was carried out. Applications for home extensions, internal alterations and retentions are not considered. The projects that could have cumulative effects with the proposed development are listed in Table 5-1 overleaf.

The Dún Laoghaire Rathdown Council Development Plan, River Basin Management Plan, Greater Dublin Drainage Plan, Dundrum Local Area Plan, and other local projects are considered in assessing cumulative effects with the currently proposed project in the Screening Assessment Section 9.2 below.

Table 5-1: Projects granted planning permission vicinity of proposed site

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
PC/2/2024	Lands at the former Central Mental Hospital, Dundrum Road, Dundrum, Dublin 14	Approved	22/12/2025	Residential scheme of 934 dwelling units on an overall site of 9.7 hectares.	An EIAR was submit with this planning application which concluded that following the mitigation measures outlined within the report, there will be no significant effects on biodiversity either alone or cumulatively with another project (Tom Phillips & Associates, 2024a).
LDR25A/0849/WEB	Marmalade Lane, Wychkam Avenue, Dundrum, Dublin 16, D16E167	Permission Conditional	19/12/2025	The proposed development will amend permitted Strategic Housing Development (SHD) ACP Reg. Ref.: 312170-21 which was granted for 531 no. residential units within 5 blocks A-E along with accesses, car, motorcycle and cycle parking, residential amenity and public and communal open space along with all associated works. The amendment proposed will replace permitted Block E in the south-west corner of the site (which comprised a total of 68 no. units) with 8 no. semi-detached, 3 storey houses. All associated works to accommodate this change are proposed including car and cycle parking, public open space and associated ancillary works. There is no change proposed to permitted Blocks A-D and all	The Planning Report stated that the EIA screening submit with the application concluded that there is no real likelihood of significant effects on the environment arising from the proposed development and therefore no EIAR is required.

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				aspects of the development as per Reg Ref ABP-312170-21 will be completed as permitted. A total of 471 no. units, 60 no. less than permitted, will be delivered as a result of this proposed amended development.	
LRD25A/0621/WEB	Lands at 97A Highfield Park (D14P710), 1 Frankfort Castle & 2 Frankfort Castle, Dublin 14	Grant Permission	18/12/2025	Large-scale Residential Development (LRD) comprising amendments to a previously permitted Strategic Housing Development (ABP Ref. 311287-21) on lands of c. 0.9 hectares. The proposed amendments will consist of: 1) The omission of 14 No. apartment units (consisting of the omission of 1 No. 1 bed unit and 13 No. 2 bed units). 1 No. 1 bed unit is proposed to be incorporated at ground floor level of Block A (adjoining space providing cycle storage and oversized storage provision), resulting in a net omission of 13 No. Units from the permitted scheme and the total provision of 101 No. Apartment units; 2) The omission of fourth floor level of Block B. Setbacks are proposed at the western elevation of second and third	No EIA Screening, EcIA or EIAR accompanied this application. The project is small in scale and has no hydrological connection with the Proposed Development. Therefore, due to the scale of the project, cumulative impacts with the Proposed Development and its adjacent habitats are not anticipated.

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				floor levels of Block A and at the southern and eastern elevations of the third floor level of Block A; at the southern elevation of second and third floor levels of Block B; and at the northern elevation of second floor level of Block C. The proposed development will include the recessing of 3 No. balconies at the western elevation of the third floor level of Block B; 3) The omission of the as permitted substation, plant and switch room from the southern boundary. A below ground water tank is now proposed at the southern boundary; 4) An amended foul drainage layout, with foul water drainage connection now proposed to the east at Dundrum Road (R117), and omission of the as permitted drainage connection to the southwest at Frankfort Court; 5) A decrease in car parking spaces from 73 No. (as permitted) to 72 No. spaces; 6) The proposed development will include the relocation of permitted creche and surface level car parking in accordance	

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				with Condition No. 2 of ABP Ref. 311287-21; and 7) All other associated works above and below ground, including landscaping, to serve the proposed development.	
PC/H/02/25	Mount St. Mary's, Dundrum Road, Dublin 14	Approved	09/06/2025	The proposed development will comprise of: • 129 no. apartment units consisting of (a) 72 no. one-bed and (b) 57 no. two-bed units in 3 no. blocks; communal space of 889sqm; and public open space of 2481sqm; • Ground level comprising (a) ESB substation (b) car, bicycle and motorcycle parking; (c) bin storage; (d) bulk storage area; and (e) supporting mechanical, electrical and water infrastructure. • Landscaping works including (a) Tree protection, tree removal and tree planting; (b) green roofs; (c) boundary treatment; (d) internal roads and footpaths; and (e) electrical services.	An Ecological Impact Statement was submit along with the planning application which identified no residual effects to be likely to arise to biodiversity following the mitigation outlined in the report is adhered to (OPENFIELD, 2024). An EIA screening was carried out with this planning application which concluded there are no likely significant effects on the environment arising from the Proposed Development and therefore it is considered that an EIAR is not required (AWN Consulting, 2025).

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				All associated site development works including (a)new vehicular access off Dundrum Road; (b) provisions for water services; (c) foul and surface water drainage and connections; and (d) attenuation proposal.	
D24A/0892/WEB	Point Lobis, Henley Court, Churchtown, Dublin 14	Grant Permission	16/04/2025	The development will consist of the demolition of an existing two storey apartment building, containing four apartments and outbuilding and the construction of a two storey terrace of 5 houses comprising 3 x 2 bed houses and 2 x 3 bed houses, bicycle shelter, landscaping and all associated site works.	No EIA Screening, EcIA or EIAR accompanied this application. The project is small in scale and has no hydrological connection with the Proposed Development. Therefore, due to the scale of the project, cumulative impacts with the Proposed Development and its adjacent habitats are not anticipated.
D24A/0862/WEB	Tambou, Clonskeagh Road, Dublin 14, D14H7X6	Grant Permission	26/03/2025	(i) demolition of existing bungalow dwelling and associated northern and eastern boundary wall; (ii) the construction of 4 no. flat roofed dwellings, comprising 2 no. two storey 2-bedroom dwellings, 1 no. two storey 4-bedroom dwelling and 1 no. three storey 4-bedroom dwelling; (iii) vehicular access to the site will be via Nutgrove Park with 4 no. on curtilage car parking spaces; and (iv) the development will	No EIA Screening, EcIA or EIAR accompanied this application. The project is small in scale and has no hydrological connection with the Proposed Development. Therefore, due to the scale of the project, cumulative impacts with the Proposed Development and its adjacent habitats are not anticipated.

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				include all associated works including, landscaping (including tree protection measures), planting and boundary treatments, infrastructure, lighting, foul/surface drainage, site works, necessary to facilitate the development. A public open space area is provided to the east of the site fronting onto Clonskeagh Road.	
LRD24A/0882/WEB	Knockrabo, Mount Anville Road, Goatstown, Dublin 14	Grant Permission	19/02/2025	A Large-scale Residential Development (LRD) application comprising amendments to a previously permitted LRD application (Dun Laoghaire Rathdown County Council (DLRCC) Reg. Ref. LRD24A/0882/WEB) on lands at Knockrabo, Mount Anville Road, Goatstown, Dublin 14. The proposed amendments will consist of: -the construction of 1 No. new part 2 storey part 3 storey (including semi-podium level) duplex block, comprising 6 No. duplex apartments (4 No. 2 bed units, and 2 No. 3 bed units) resulting in the total provision of 156 no. units (comprising 12 no. houses and 144 no. duplex/apartment units); -the provision of 8 No. car parking	An EcIA was submitted along with the application. This report concluded that the overall impact on the ecology of the proposed development will result in a long term minor adverse not significant long term residual impact on the ecology of the area, and it is not considered likely that it would result in cumulative impacts with other existing and/or approved plans or projects (Altemar, 2024). The EIA screening report submitted along with the application concluded that the works, individually and cumulatively, would not give rise to any significant effects on the environment and therefore no EIA is required (Tom Phillips &

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				spaces at grade level (including 1 No. accessible parking space), 22 No. bicycle parking spaces, and 1 No. motorcycle parking space; and all other ancillary site development works.	Associates, 2024b)
LRD24A/0974/WEB	Vector Motors, Goatstown Road, Dublin 14, D14FD23	Grant Permission	06/02/2025	The development will consist of demolition of the existing building (c.960sqm) and hard surface parking area on site and construction of a purpose built student accommodation development (including use as tourist or visitor accommodation outside the academic term) comprising: 220 no. student bedspaces (including 10 no. studios), all within a part single storey, part 4 no. storey and part 6 no. storey 'U'-Shaped building; The building is single to 4 no. storeys along the southern boundary, part 5 and 6 storeys along Goatstown Road and northern boundary (with setbacks); External amenity space of c. 1,247 sqm is provided in the form of a central courtyard at ground level (c. 694 sq. m) and roof terraces at 4th floor level (c. 220 sq. m) and 5th floor level (c. 333 sq. m) fronting onto Goatstown Road; Internal	The EcIA accompanying the application concluded that the proposed development will not result in any significant impacts on ecological receptors identified both onsite and in the surrounding area following the implementation of appropriate mitigation measures (Malone O'Regan, 2024). The EIA screening report accompanying the application determined that there is no real likelihood of significant effects on the environment (direct, indirect or cumulatively with other developments) and therefore it is considered that the requirement for sub-threshold EIA does not arise (AWN Consulting, 2024)

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				amenity space equating to c. 538 sqm is provided in the form of 2 no. ground floor lounge/study areas, kitchen/tearoom, laundry, and concierge/office space; Provision of 218 no. bicycle parking spaces distributed across the central courtyard and northern boundary and adjacent to the front boundary of the site (north-west); Provision for 6 no. carparking spaces comprising 2 no. disabled parking spaces and 4 no. setdown parking spaces adjacent to the front entrance to the site; Vehicular access to the site is via Goatstown Road from 2 no. entrance points [reduction from 3 no. entrances currently]; Ancillary single storey ESB substation and switch room and refuse store are provided at ground level; Provision of surface water and underground attenuation and all ancillary site development works including site wide landscaping works, lighting, planting and boundary treatments.	
LRD23A/0719	Mount Anville Lands, Lower Kilmacud Road, Dublin	Grant Permission	31/07/2024	The development will consist of: The demolition of existing dwelling and outbuildings known as the 'Old Farm' and the	An EIA screening report accompanied this application. The report concluded that no likely significant effects on the

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
	14, D14KX80			construction of 114 no. residential units comprising of 100 no. apartments and 14 no. houses (74 no. 1-bed and 40 no. 2-bed units) to form an Assisted Living Accommodation/Retirement Homes development, solely for persons 65 and over, consistent with the definitions of Assisted Living/Retirement Homes and Sustainable Neighbourhood Infrastructure Zoning Objective and Specific Local Objective attached to the site. Block A will range 2-3 storeys in height and will provide 12 no. apartments. (Supporting amenities located on ground floor include a prayer room, communal area and library). Blocks B, C and D will range 2-3 storeys in height and will provide 7 no. apartments each. (Blocks A-D are situated along the west of the site). Block E will be 5 storeys in height and will provide 19 no. apartments. (Supporting communal residential amenities at ground floor include a communal social room with Barista bar, library and reading room, gym area, small cinema, pre kitchen area, indoor and outdoor café for residents and their visitors,	environment either alone or cumulatively with other plans or projects, are identified as a result of the Proposed Development (Enviroguide, 2023).

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				consulting rooms for medical, wellness and personal supports, and administration/reception area with staff facilities). Block F will be 3 storeys in height and will provide 24 no. apartments. Block G will be 5 storeys in height and will provide 24 no. apartments. (Blocks E-G are situated in the lower walled garden and are organised around a central communal courtyard with resident facilities). The proposed 14 no. houses will range in height from 1.5-2 storeys. These are situated along the east of the site. The residential development is organised outside and around the upper walled garden which contains the protected Glasshouse (Protected Structure RPS. 2100) which will not be altered other than maintenance and will continue its existing horticultural use. The upper walled garden will be organised to contain open lawn, a sensory garden, reflective orchard, beehives and a food production garden and will contain an outdoor community cafe space served from a 12 sqm cafe structure at the northeast corner. The	

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				proposal will include the removal of sections of brick/stone walls from the lower walled garden and new openings and pathways through the upper walled garden for access. Pedestrian, cyclist and vehicular access will be from the existing entrance from Lower Kilmacud Road. Existing access to Sophie Barat Residence and 'nun's walk' shall be retained and maintained. The layout is served by 20kmph residential streets and a network of paths. Car parking for 76 no. cars (12 no. EV, 4 no. accessible, 2 no. community car share spaces) and 147 no. bicycle spaces (33 no. short-stay and 114 no. long-stay) are located throughout the site at surface level. Site servicing (including ESB substations), plant areas, PV panels, site lighting, bin stores, balconies/terraces, reprofiling, landscaping, tree planting & transplanting and SUDS measures are incorporated and integrated into the proposed development.	
D23A/0604	Nutgrove Community Enterprise	Grant Permission	4/1/2024	The development will consist of a 1788.3sqm three storey office building, formed by a ground	No EIA Screening, EcIA or EIAR accompanied this application. The project is small in scale and

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
	Centre, Nutgrove Way, Rathfarnham, Dublin 14, D14A8P7			floor open parking podium, entrance lobby, plant and bathroom facilities at ground floor level, with two levels of office, meeting spaces and toilets above. associated groundworks to support the new structure, associated rainwater goods and drainage, and alterations to the existing car parking area to include external lighting and landscaping. Bicycle parking and fencing to the extended eastern boundary perimeter will also be provided as part of this development	has no hydrological connection with the Proposed Development. Therefore, due to the scale of the project, cumulative impacts with the Proposed Development and its adjacent habitats are not anticipated.
D23A/0048	80, Slieve Rua Drive, Kilmacud, Blackrock, Dublin, A94N6Y5	Grant Permission	21/7/2023	The development consists of the demolition of 80 Sliabh Rua Drive and the construction of five two storey two-bedroom dwellings and one two storey three-bedroom dwelling, and associated works.	As stated by the Planning Report, an EIA screening was carried out for this development which determined there is no likelihood of significant effects on the environment arising from the proposed development and therefore there is no need for an EIAR.
D23A/0163	Lands at the UCD Sports Precinct east of Newstead and north of the Campus Ring Road Extension of Wynnsward	Grant Permission	19/6/2023	The development will consist of the construction of a multi-Purpose Performance & Examination Centre over three floors comprising a multi-purpose sports hall (c. 4500 sqm, c13.3 metres in height) performance centre (c. 2260 sqm, c. 15.8 metres in height)	An EcIA was submitted alongside this application. This report determined that the proposed development will have no predicted impacts on local ecology and biodiversity once the mitigations outlined within the report are adhered to (Moore

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
	Drive), University College Dublin, Belfield, Dublin 4			and tennis centre (c.3425sqm. c.13.3 metres in height) providing 5 no. indoor tennis courts and all associated facilities including plant area at lower ground floor area (c. 395 sqm) located to the west of the existing UCD Sports Centre and additional roof level plant and green roof. Landscaped area and 'Sports Plaza' providing informal recreation, pedestrian and cycle connections to the west and south of the proposed buildings and a skills wall in the northern part of the site. 1 no. existing tennis court in the southern part of the site to be retained with 2 no. courts removed. Additional pedestrian and cycle connections are provide to the east of the proposed buildings providing links to the adjoining uses with 4 no. accessible car parking spaces (1 no. EV charging point) and set down area and cycle parking and the removal of 164 no. car parking spaces and relocation of 3 no. 5-a-side soccer pitches. Works to existing student centre to provide alternative fire escape. All associated access (Campus Ring Road), infrastructure and	Group, 2023).

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
				works to facilitate the development including 1. no. substation and 1 no. water pumphouse. 9 no. signage zones are included on the southern, western and eastern elevations of the MPPEC building providing a total of c.255 sqm.	
D22A/0919	Ballawley Lodge, Sandyford Road and part of the rear gardens of No. 4 Clonard Road and Clonard lodge at the cornor of Clonard Road/ Sandyford Road, Dublin 16	Grant Permission	24/5/2023	The development will consist of the following: Demolition of all buildings on site and construction of a housing development comprising 8 no. 2-3 storey, 3-bed, terraced houses (ranging in size from c.135 sqm to c.162 sqm). Each house will be provided with private rear garden, and also and additional 2nd floor front terrace for each of the 5 no. type A units. Development to be served by existing access from Sandyford Road. Provision of car parking, bin store, pocket park, hard/ soft landscaping, boundary treatments and all ancillary site development works and services provision required to facilitate the development.	No EIA Screening, EcIA or EIAR accompanied this application. The project is small in scale and has no hydrological connection with the Proposed Development. Therefore, due to the scale of the project, cumulative impacts with the Proposed Development and its adjacent habitats are not anticipated.
D22A/0421	Site to the south of Dundrum Office Park,	Grant Permission	16/5/2023	The development will consist of the construction 21 no. apartments (8 no. one bedroom; 11 no. two bedroom; and 2 no.	No EIA Screening, EcIA or EIAR accompanied this application. The project is small in scale and has no hydrological connection

Planning Reference	Address	Application Status	Decision Date	Summary of Development	Cumulative Assessment
	Dundrum 14 to the rear of 7, 8 and 9 Main Street, Dundrum Dublin 14			three bedroom) in 1 no. four and six storey block incorporating 42 no. residents cycle parking and waste storage at lower ground floor, a resident's terrace on the roof of the fourth floor, a green roof, and the installation solar panels on the roof; the provision of landscaped communal open space incorporating internal access routes, children's play area, outdoor seating areas, 5 no. visitor cycle parking spaces, an ESB substation and bin storage building; and all other site works above and below the ground required to facilitate the development including the formation of a pedestrian gate onto the eastern boundary from the Dundrum Office Park and ramp access and ancillary landscaping including tree planting.	with the Proposed Development. Therefore, due to the scale of the project, cumulative impacts with the Proposed Development and its adjacent habitats are not anticipated.

6 Impact Assessment

6.1 Introduction

The impacts on the valued ecological features are assessed here. The initial assessment considers the potential impact pathways and whether these apply to the ecological features. The impact assessment considers the project and the anticipated effects in the absence of any mitigation.

The potential impacts from the development are assessed under the following:

- Disturbance to habitats and species
- Habitat loss (foraging, commuting, general refuge and nesting)
- Impacts on water quality

The following sections describe the nature of immediate / short-term impacts, as well as any medium or long-term impacts, predicted for habitats and species in the absence of implemented mitigation measures during the maintenance works.

6.2 Do Nothing Scenario

If the proposed works were not to go ahead and the present land management continues as is, the ecological value of the site would remain unchanged.

6.3 Construction Phase

6.3.1 Habitats

6.3.1.1 Amenity grassland (improved) [Low local]

During the construction phase, the amenity grassland habitat on the bank along the eastern boundary of the site will be retained. The smaller area of amenity grassland situated west of the bank will be removed in its entirety. The retained amenity grassland will be at risk of damage and disruption due to the generation of airborne pollutants (e.g. dust and emissions) and the risk of run-off pollutants (e.g. hydrocarbons) that will arise from machinery during the construction phase.

Therefore, in the absence of mitigation during the construction phase, **a short-term negative impact of slight significance** is anticipated for this habitat.

6.3.1.2 Mosaic: Amenity grassland (improved) / Spoil and bare ground [Low local] and Mosaic: Amenity grassland (improved) / Ornamental/non-native shrub [Low local]

During the construction phase, the amenity grassland mosaics within the development footprint will be removed in their entirety. However, the proposed landscaping plan will provide habitat enhancement through the establishment of higher-value habitats, including medium to large native and ornamental flowering trees, species-rich meadow planting, and areas of managed

play lawn. Sections of the area will be developed as hard landscaping, including pedestrian walkways.

Therefore, in the absence of mitigation in the construction phase, **a short-term negative impact of slight significance** is anticipated for this habitat.

6.3.1.3 Dry meadows and grassy verges [High local]

During the construction phase, the dry meadow habitat will be retained. The retained dry meadow habitat will still be susceptible to a range of potential negative impacts generated from the construction activities. Accidental spillages of harmful substances (e.g. hydrocarbons and solvents), which may come in direct contact with and negatively impact the physiological health of grassland flora. Additionally. This dry meadow habitat has the potential to be physically damaged from excessive footfall from workers present on-site, compaction from light and heavy machinery and temporary material stock-piling. Furthermore, these dry meadow habitats also have the potential to be impacted by dust-based pollution during the construction phase, with cement-based dusts being of particular concern given their capacity to degrade the cellular structures of floral species.

Moreover, the potential spread of invasive non-native species, in particular Butterfly-bush has the potential to result in the displacement of native flora via shading impacts and higher rates of colonisation within areas of open and/or disturbed ground.

Therefore, in the absence of mitigation during the construction phase, a **short-term negative impact of slight significance** is anticipated for this habitat.

6.3.1.4 Hedgerows [High local]

During the construction phase, the hedgerow habitat along the eastern boundary of the site will be retained. This habitat will still be susceptible to potential negative impacts generated from the construction activities. This habitat has the potential to be adversely impacted by dust-based pollution during the construction phase, with cement-based dusts being of particular concern given their particular ability to degrade the epidermis layer of the leaves and tree species.

Moreover, the potential spread of invasive non-native species has the potential to result in the displacement of native flora via shading impacts and higher rates of colonisation within areas of open and/or disturbed ground.

Therefore, in the absence of mitigation during the construction phase, a **temporary negative impact of slight significance** is anticipated for this habitat.

6.3.1.5 Treelines [High local]

During the construction phase, the treeline habitats directly outside of the site boundary will be retained. These treelines will still be susceptible to potential negative impacts generated from the construction activities. This habitat has the potential to be adversely impacted by dust-based pollution during the construction phase, with cement-based dusts being of particular concern given their particular ability to degrade the epidermis layer of the leaves and tree species.

Therefore, in the absence of mitigation during the construction phase, a **temporary negative impact of slight significance** is anticipated for this habitat.

6.3.1.6 Ornamental/non-native shrub [Low local]

During the construction phase, the ornamental/non-native shrub habitat located in the south-eastern section of the site will be removed in its entirety. This habitat will be replaced as part of the proposed landscape plan, which includes replanting with similar ornamental shrub planting alongside areas of hard landscaping. The retention or removal of the linear area of ornamental shrub along the southern boundary of the site has not yet been confirmed within the landscaping plan.

Therefore, in the absence of mitigation in the construction phase, a **short-term negative impact of slight significance** is anticipated for this habitat.

6.3.1.7 Depositing/lowland rivers [High local],

During the construction phase, the River Slang will be potentially exposed to a range of construction emissions via surface water, groundwater and air-based pollutant pathways. The surface water pathway is of most concern, given that the unintended introduction of pollutants (e.g. hydrocarbon leakages and cement leachate) and excess sediment into the river have the potential to notably degrade the water quality and influence its pH levels (beyond its normal range), with knock-on impacts for local flora and fauna. The most likely pathway is via the surface water drainage system.

Additionally, the River Slang will also be potentially impacted by dust-based pollution during the construction phase, with cement-based dusts being of particular concern given their capacity to degrade the structures of epidermal cells of flora, which will damage the emergent flora within the river. Moreover, alkaline cement-based dusts have the potential to affect the rivers pH levels, potentially harming pH-sensitive aquatic flora and fauna, including fish.

A Flood Risk Assessment report for the Dundrum Community Centre completed by JBA in 2022 determined that the southern part of the site is located within fluvial Flood Zone B and the remainder of the site is located within Flood Zone C. The site is at risk of both pluvial and fluvial flooding (JBA, 2022).

Therefore, in the absence of mitigation during the construction phase, a **short-term negative impact of moderate significance** is anticipated for this habitat and associated species.

6.3.2 Fauna

6.3.2.1 Non-volant Mammals (Hedgehog) [High local]

While no signs of Hedgehog habitation were present on site, this does not ensure that this species doesn't utilise the site for foraging and refugia resources. Bearing this in mind, minor impacts may arise in the form of disturbance to foraging and commuting activities, as well as potential loss of life to individuals in the case of accidents within the construction site (e.g. accidental trappings), after failure to exclude entry.

Therefore, in the absence of mitigation during the construction phase, a **temporary negative impact of slight significance** is anticipated for Hedgehog.

6.3.2.2 Bats – Foraging and Commuting [High local]

During the construction phase, there will be a direct loss of foraging resources for local bat species due to the removal of small areas of grassland habitat. However, the extent of habitat loss is limited, and the existing hedgerow and dry meadow habitats will be retained, as will tree lines in surrounding environs outside the site boundary. Additional construction phase lighting during the bat foraging season may also result in some disturbance to foraging activity however, the site is located within an already well-lit urban environment, reducing the potential for significant impacts.

Therefore, in the absence of mitigation during the construction phase, a **temporary negative impact of slight significance** is anticipated for local foraging and commuting bat species.

6.3.2.3 Breeding Birds [High local]

During the construction phase, noise generated by construction activities may disturb breeding bird species. Pollution spill events may damage the retained hedgerow and dry meadow habitats, which will result in a loss of foraging resources for breeding birds. Additionally, adverse impacts on the retained habitats and the surrounding treelines arising due to dust-based pollution during the construction phase has the potential to reduce foraging and nesting resources for local breeding birds.

Therefore, in the absence of mitigation during the construction phase, a **temporary negative impact of slight significance** is anticipated for local breeding birds.

6.3.2.4 Amphibians [High local], Fish [High local]

During the construction phase, amphibians such as Common Frog associated with the Slang River will be potentially exposed to a range of construction emissions via surface water, groundwater and air-based pollutant pathways. The surface water pathway is of most concern, given that the unintended introduction of pollutants (e.g. hydrocarbon leakages and cement leachate) and excess sediment into the river have the potential to notably degrade the water quality and influence its pH levels (beyond its normal range), with knock-on impacts for associated amphibian species like Common Frog.

Additionally, Common Frog will also be potentially impacted by dust-based pollution during the construction phase, with cement-based dusts being of particular concern given the sensitivity of their permeable skin.

Fish species are also likely to be impacted by exposure to construction emissions via surface water, groundwater and air-based pollutant pathways.

Therefore, in the absence of mitigation during the construction phase, a **short-term negative impact of moderate significance** is anticipated for amphibians and fish.

6.3.2.5 Terrestrial Invertebrates [High local]

During the construction phase, the removal of grassland habitats and the individual trees within these habitats, will lead to the reduction in the available foraging, commuting, and nesting resources for local terrestrial invertebrates. Additional construction phase impacts may arise in the form of visual and audible disturbance to foraging and commuting activities. Nesting

resources may be impacted through the generation of dust-based pollution from construction activities. In the event of a potential pollution spill (e.g. leaking or spilled hydrocarbons), foraging and commuting activities may be further disturbed through degradation of floral and prey items.

Therefore, in the absence of mitigation during the construction phase, a **short-term negative impact of slight significance** is anticipated for local terrestrial invertebrate species.

6.3.3 Invasive Non-native Species

During the construction phase, the INNS present on-site, such as Butterfly-bush, has the potential to spread further within the site and the surrounding area. The disturbance of topsoil has the potential to lead to the spread of thi species within the site and externally in the local area. Vehicles used during the construction phase have the potential to spread invasive species to the surrounding area by carrying seeds on their tyres. Additionally, personnel on-site may spread invasives via footwear, which may pick up seeds or other vegetative matter, facilitating the spread of INNS. The spread of INNS will degrade all local habitats and make them less suitable for local fauna.

Therefore, in the absence of mitigation during the construction phase, the planned works may lead to the **increased spread of INNS within the site and in the surrounding area.**

6.4 Operation Phase

6.4.1 Habitats

6.4.1.1 Amenity grassland (improved) [Low local]

During the operational phase, the amenity grassland habitat on the bank along the eastern site boundary will be retained. The small area of amenity grassland removed during the construction phase will be replaced with higher ecological value landscaping, including a pollinator friendly shade mix, shrub planting, ornamental trees, and medium to large trees, together with an area of hardstanding. The introduction of this landscaping will offset the loss of this habitat, however, the newly planted trees will require several years to reach semi-maturity and begin to fulfil their ecological roles.

Therefore, in the absence of operational mitigations, an **long-term negative impact of slight significance** is anticipated for this habitat. . However, given the low ecological value of this habitat, the **loss is not considered significant** in the wider ecological network.

6.4.1.2 Mosaic: Amenity grassland (improved) / Spoil and bare ground [Low local] and Mosaic: Amenity grassland (improved) / Ornamental/non-native shrub [Low local]

During the operational phase, these amenity grassland mosaic habitats will have been removed in their entirety and replaced primarily with medium to large native and ornamental flowering trees, species-rich meadow planting, and areas of managed play lawn. Sections of the area will be developed as hard landscaping, including pedestrian walkways.

Therefore, in the absence of operational mitigations, **a long-term negative impact of profound significance** is anticipated for this habitat. However, given the low ecological value of this habitat, the **loss is not considered significant** in the wider ecological network.

6.4.1.3 Dry meadows and grassy verges [High local]

During the operational phase, the dry meadow habitat is to be retained. Additional meadow planting is proposed within the landscape plan in the north-western section of the site.

Therefore, in the absence of operational mitigations, a **long-term positive impact of slight significance** is anticipated for the dry meadow habitat.

6.4.1.4 Hedgerows [High local]

During the operational phase, the hedgerow outside the eastern site boundary will be retained. Additional hedgerows are proposed in the landscape plan along the northern and western boundary of the site. Newly planted trees within these hedgerows will require several years to reach semi-maturity and begin to fulfil their ecological roles.

Therefore, in the absence of operational mitigations, a **long-term positive impact of slight significance** is anticipated for this habitat.

6.4.1.5 Treelines [High local]

During the operational phase, the existing treelines outside of the site boundary are to be retained, with no additional treeline planting proposed within the landscape plan.

Therefore, in the absence of operational mitigations, there will be a **long-term neutral impact** anticipated for this habitat.

6.4.1.6 Ornamental/non-native shrub [Low local]

During the operational phase, the ornamental/non-native shrub habitat within the south-eastern and southern section of the site will be removed in its entirety and replaced predominantly with similar ornamental shrub planting, granite sleepers through planted areas, and areas of hard landscaping. Additional ornamental shrub planting is proposed throughout the site, particularly within the northern, western, and central areas.

Therefore, in the absence of operational mitigations, a **long-term positive impact of slight significance** is anticipated for this habitat.

6.4.1.7 Depositing/lowland rivers [High local]

During the operational phase, there are anticipated to be no additional impacts on the Slang River.

Therefore, in the absence of operational mitigations, a **long-term neutral impact** is anticipated for this habitat.

6.4.2 Fauna

6.4.2.1 Non-volant Mammals (Hedgehog) [High local]

During the operational phase, the loss of foraging resources associated with the removal of small areas of grassland habitat during construction will be offset through the proposed landscaping plan. The existing hedgerow and dry meadow habitats will be retained, while additional hedgerows, tree and shrub planting, together with meadow grassland areas, are proposed throughout the site. These measures will provide additional foraging, commuting, and refuge resources for local Hedgehogs. Additional lighting with 2700K LED, will be introduced during the operational phase, which has the potential to affect Hedgehog activity however, the site is located within an already well-lit urban environment, reducing the likelihood of significant impacts.

Therefore, in the absence of operational mitigations, an **initial short term negative impact of slight significance** is anticipated for local Hedgehog.

6.4.2.2 Bats – Foraging and Commuting [High local]

During the operational phase, the existing hedgerow and treeline habitats outside the site boundary will be retained, maintaining commuting corridors and foraging resources for local bat species. Habitats with foraging potential that are being removed as part of the development will be replaced through landscape planting, including new hedgerows, trees, meadow grassland

areas, and tree clusters. These measures are expected to enhance the availability of foraging and commuting resources for local bats.

Changes to the site's operational lighting will occur as part of the proposed development. Four existing 4000K lighting columns and luminaires will be removed from the site, while a further existing 4000K column will be removed and replaced with a new 5m lighting column with a 2700K LED luminaire. The remaining existing lighting columns will be retained and will continue to operate at 4000K in accordance with DLRCC standards. In addition, 9 new Luminaire A fixtures and 3 new Luminaire B fixtures will be introduced at a mounting height of 5m and will have 2700K LED lighting. While the introduction of additional lighting has the potential to disrupt bat foraging and commuting activity, the use of warm spectrum 2700K lighting reduces the potential for disruption compared to the higher colour temperature lighting.

Additional Gobo lighting with 5700K LED is also proposed. This lighting has the potential to negatively affect bat foraging and commuting due to its higher colour temperature however, it will be restricted to a limited number of locations within the northern section of the site, primarily beneath the bridge and within the new plaza areas.

Therefore, in the absence of operational mitigations, a **long-term negative impact of slight significance** is anticipated for local bats.

6.4.2.3 Breeding Birds [High local]

During the operational phase, the existing treelines and hedgerow habitats within and adjacent to the site boundary will be retained, ensuring that current nesting resources for local breeding bird species are maintained. In addition, the proposed landscape plan includes new hedgerow and tree planting, which will provide increased nesting resources for breeding birds once the trees reach semi-maturity after several years. Further landscaping, including shrub planting and meadow grassland areas, will increase the availability of foraging resources for breeding birds.

Therefore, in the absence of operational mitigations, a **long-term positive impact of slight significance** is anticipated for local breeding birds.

6.4.3 Amphibians and Fish

During the operational phase, due to the drainage design and SuDS measures there are anticipated to be no additional impacts on amphibians and fish species.

Therefore, in the absence of operational mitigations, a **long-term neutral impact** is anticipated for these groups of fauna.

6.4.3.1 Terrestrial Invertebrates [High local]

During the operational phase, grassland habitats removed as part of the development that currently provide foraging and commuting resources for local terrestrial invertebrate species will be replaced with larger areas of species-rich grassland, hedgerow planting, and additional shrub and tree planting. These habitats will provide enhanced nesting, foraging and commuting resources for local terrestrial invertebrate species. Although there will be an initial ecological lag period while the planted trees and hedgerows establish and reach semi-maturity, invertebrates will still be able to utilise the immature habitats for foraging and refuge.

Therefore, in the absence of operational mitigations, a **long-term positive impact of slight significance** is anticipated for local terrestrial invertebrate species.

6.4.4 Invasive Non-native Species

During the construction phase, the invasive species present on site currently may be spread within the site and the surrounding area, which will have the potential to impact the proposed landscape plan. Therefore, in the absence of specific invasive species mitigation during the construction phase, a **short to long term invasive species impact** is anticipated for the habitats present within the site during the operation phase.

6.5 Summary

The following potential significant impacts have been identified and mitigation is discussed in the next chapter:

- Impacts through the generation of pollutants (dust, noise, spills etc) during the works.
- Impacts through the physical damage and direct removal of local habitats.
- Disturbance of commuting, foraging and refuge activities for local Hedgehog.
- Disturbance of commuting and foraging activities for bats from construction and operational lighting.
- Disturbance of foraging and nesting resources for local breeding birds.
- Impacts through pollution on amphibians and fish
- Disturbance to commuting, foraging and nesting for local terrestrial invertebrates.

The mitigation is based on that proposed in existing guidance documentation and where necessary additional mitigation is proposed to reduce the impacts identified above.

7 Mitigation

The following mitigation is recommended to ensure that the proposed works do not adversely impact on the ecological receptors outlined in Section 6.

Mitigation measures for anticipated impacts on designated sites and ecological features are outlined below.

7.1 Project Construction Phase

7.1.1 Standard Environmental Best Practice

The activities of the project for the construction phase shall remain within the boundary of the proposed site. Within this area, the mitigation measures outlined below shall be implemented within the contractor's operation plan.

- CIRIA Guidance C741: *Environmental good practice on site guide* (Charles & Edwards, 2015; CIRIA, 2019 - www.ciria.org);
- CIRIA Guidance C750D: *Groundwater control: design and practice* (Preene *et al.*, 2016; CIRIA, 2019 - www.ciria.org

7.1.2 Environmental Management of Site Compound

- It is preferred that the works compound be located in the artificial surfaces within the site, that it is not in close proximity to treelines, individual trees, or the meadow of higher value.
- Only plant and materials necessary for the construction of the works will be permitted to be stored at the compound location.
- Site establishment by the Contractor will include the following:
    - Site offices;
    - Site facilities (such as canteen, toilets, drying rooms, etc.);
    - Secure compound for the storage of all on-site machinery and materials;
    - Temporary car parking facilities;
    - Temporary fencing;
- Site Security to restrict unauthorized entry;
- Bunded storage of fuels and refuelling area. Bunds shall be 110% capacity of the largest vessel contained within the bunded area.
- A separate container will be located in the Contractors compound to store absorbents used to contain spillages of hazardous materials. The container will be clearly labelled, and the contents of the container will be disposed of by a licenced waste contractor at a licenced site. Records will be maintained of material taken off site for disposal.
- A maintenance programme for the bunded areas will be managed by the site environmental manager. The removal of rainwater from the bunded areas will be their responsibility. Records will be maintained of materials taken off site for disposal.
- The site environmental manger will be responsible for maintaining all training records.
- Drainage collection system for washing area to prevent run-off into surface water system.

- Wherever reasonably practical, refuelling of vehicles will be carried out off site to reduce risk of accidental hydrocarbon pollution events.

7.1.3 Pollution Control and Spill Prevention

A minimum stock of spill kits will be maintained at all times and site foremen's vehicles will carry large spill kits at all times. Absorbent material will be used with pumps and generators at all times and used material disposed of in accordance with the Waste Management Plan.

Regular inspections and maintenance of plant and machinery checking for leaks, damage or vandalism will be made on all plant and equipment.

In the event of a spill the Contractor will ensure that the following procedure are in place:

- Emergency response awareness training for all project personnel on-site works.
- Appropriate and sufficient spill control materials will be installed at strategic locations within the site.
- All potentially polluting substances such as oils and chemicals used during construction will be stored in containers clearly labelled and stored with suitable precautionary measures such as bunding within the site compound.
- Oil soakage pads will be maintained on-site to enable a rapid and effective response to any accidental spillage or discharge. These shall be disposed of correctly and records will be maintained by the environmental manager of the used booms and pads taken off site for disposal.
- Damaged or leaking containers will be removed from use and replaced immediately.

7.1.4 Protection of Surface Water, Groundwater and Air Quality

In order to protect surface water, groundwater and air quality throughout the proposed development site, the contractor will be required to implement the prepared surface water management, environmental incident response, and dust management details outlined below. A Preliminary Construction & Environmental Management Plan (CEMP) was prepared by DBFL Consulting Engineers (2026) for the new public realm and plaza East and North of Waldemar Terrace (2026) outlining mitigation measures for the protection of surface water, groundwater and air quality.

7.1.4.1 Surface Water Management

The following surface water control and management best guidance documents were referenced in the production of the surface water management mitigations:

- Control of Water Pollution from Construction Sites. Guidance for Consultants and Contractors (C532) (Construction Industry Research and Information Association) (CIRIA, 2001);
- Best Practice Guide BPGCS005 – Oil Storage Guidelines (Enterprise Ireland, 2003);
- PUB C811 Environmental Good Practice on Site, 5th Edition (CIRIA, 2023);
- Safety, Health and Welfare at Work (Construction) Regulations 2013 – S.I. No. 291 of 2013; and

- Road Drainage and the Water Environment DN-DNG-03065 (TII, 2015).

In order to safeguard the local surface water network, and in turn the local groundwater network, from surface water-based pollution events, the following must be strictly adhered to:

- The contractor will ensure compliance with environmental quality standards specified in the relevant legislation, namely European Communities (Environmental Objectives (Surface Waters)) Regulations, 2009 (S.I. No. 272 of 2009 and amendments);
- Management of silt-laden water on-site, including procedures for accidental leaks / spills to ground, as well as water quality monitoring to ensure compliance with environmental quality standards specified above;
- At no point during the construction phase will untreated water be discharged to local surface water drainage network without the water quality meeting the statutory limits as set under the environmental quality standards specified above, or limits imposed by a relevant authority;
- Fail-safe site drainage and bunding, e.g. drip trays on plant and machinery will be provided to prevent discharge of chemical spillage from the sites to surface water;
- To prevent the spread of any accidental discharge into the surface water drainage network, oil retention booms will be on hand when construction activities are located adjacent to drains in order to control and minimise the spread of the spill;
- Washout of concrete plant will occur at a designated impermeable area with waste control facilities (C649 – CIRIA, 2006b);
- Concrete delivery, concrete pours and related construction methodologies will be part of the procedure agreed with the contractor to mitigate any possibility of spillage or contamination of the local environment. Particular attention will be paid during the pouring process in order to avoid leakages or spills of concrete; and

Temporary stockpiles will be monitored for leachate generation. These stockpiles will be placed within designated areas (C649 – CIRIA, 2006b) and be located a minimum of 10m from any surface water drains.

The mitigation measures outlined within the Preliminary CEMP (DBFL, 2026) relating to surface water runoff management include:

- Surface water runoff from areas stripped of topsoil and surface water collected in excavations will be directed to on-site settlement ponds where measures will be implemented to capture and treat sediment laden runoff prior to discharge of surface water at a controlled rate;
- Discharge from any vehicle wheel wash areas is to be directed to on-site settlement ponds;
- On-site settlement ponds are to include geotextile liners and riprapped inlets and outlets to prevent scour and erosion;

- Pouring of concrete including wash down and washout of concrete from delivery vehicles will be controlled in an appropriate facility to prevent contamination; and
- Surface water discharge points during the construction phase are to be agreed with DLRCC's Environmental Section prior to commencing works on site.

Control of Sediment

There are a number of sources of sedimentary or silt-laden water on a construction site, including silty 'runoff' from stripped soils; and the stockpiling of soils. Control measures for each of these are provided in the Preliminary CEMP (DBFL, 2026). These measures include:

- Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment retention ponds, surface water inlet protection and fencing and signage around specific exclusion zones) prior to discharge of surface water at a controlled rate;
- Weather conditions and seasonal weather variations shall be taken account of when planning stripping of topsoils and excavations, with an objective of minimising soil erosion; and
- The duration that rock layers are exposed to the effects of weather shall be minimised by back filling excavations as soon as practicable after construction of the drainage and pumping station.

Fuel and Chemical Spillages

Emergency procedures will be further developed by the contractor with either project-specific works, area-specific or activity-specific measures, and all personnel will be required to know these procedures.

Effective pollution control relies on the following elements, with regards to fuel, and chemical spillages:

- Identification of receptors / pathways (e.g. amenity grassland/surface water drains);
- Identification and clear marking of surface water drain locations within the construction compound and other work areas;
- Having designated re-fuelling areas;
- All hydrocarbons used during the construction phase will be appropriately handled, stored, and disposed of in accordance with recognised standards as laid out by the EPA;
- Identification of all possible emergency scenarios;
- Effective planning, e.g. oil booms and oil soakage pads will be maintained at appropriate locations on site to enable a rapid and effective response to any accidental spillage or discharge. These shall be disposed of correctly and records will be maintained by the environmental manager of the used booms and pads taken off site for disposal;
- Identification and dissemination of contact numbers;
- Definition of personnel responsibilities;

- Assurance that all appropriate personnel are aware of the emergency procedure(s) (e.g. spillage, leakage, fire, explosion, and flooding), that drain covers and spill kits are available, and personnel know how to use them;
- Refuelling and servicing of construction machinery shall take place in a designated hardstand area which is also remote from any surface water inlets (when not possible to carry out such activities off site);
- An Emergency Response Plan detailing the procedures to be undertaken in the event of a spillage of chemical, fuel or hazardous wastes will be prepared prior to construction;
- Pouring of concrete including wash down and washout of concrete from delivery vehicles shall be controlled in an appropriate facility to prevent contamination; and
- Regular samples shall be taken from soils affected by earthworks which shall be analysed for contamination.

7.1.5 Dust Generation Management

The following dust management mitigations provide the strategy to be adopted in order to manage dust during construction. These mitigation measures are in accordance with the IAQM Guidance (IAQM, 2024), with the mitigation measures proposed in accordance with the determination that the highest risk category will be applied to the construction phase of the proposed development.

7.1.5.1 Construction Dust Mitigations

Dust Management

The dust management mitigations within the CEMP will be updated by the construction contractor prior to the commencement of the construction phase, so as to include any additional measures required pursuant to conditions attached to any decision to grant approval. The mitigations may include measures to control other emissions, approved by the Local Authority. The level of detail will depend on the risk and will include as a minimum the recommended dust mitigation measures outlined below. The recommended construction dust mitigation measures will be implemented as appropriate for the site. The dust management strategy will also include monitoring of dust deposition, dust flux, real-time PM10 continuous monitoring and visual inspections.

Site Management

- Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken;
- Make the complaints log available to the local authority when asked; and
- Record any exceptional incidents that cause dust and/or air emissions, either on or offsite, and the action taken to resolve the situation in the logbook.

Monitoring

- Carry out regular site inspections to monitor compliance with the DMP, record inspection results, and make an inspection log available to the local authority when asked; and
- Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

Preparing and maintaining the site

- Plan site layout so that machinery and dust causing activities are located away from receptors, such as any surface water drains, as far as possible;
- Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site;
- Fully enclose site or specific operations where there is a high potential for dust production and the site is actives for an extensive period;
- Avoid site runoff of water or mud;
- Keep site fencing, barriers and scaffolding clean using wet methods;
- Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below; and
- Cover, seed or fence stockpiles to prevent wind whipping.

Operating vehicle/machinery and sustainable travel

- Ensure all vehicles switch off engines when stationary - no idling vehicles;
- Avoid the use of diesel- or petrol-powered generators and use mains electricity or battery powered equipment where practicable;
- Impose and signpost a maximum-speed-limit of 15mph on surfaced and 10mph on unsurfaced haul roads and work areas; and

Operations

- Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems;
- Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where appropriate;
- Use enclosed chutes and conveyors and covered skips;
- Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate; and
- Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.

Waste Management

- Avoid bonfires and burning of waste materials.

The IAQM Guidance (IAQM, 2024) Mitigation Measures applicable to the specific works to be undertaken as part of the proposed project are as follows:

Measures specific to earthworks

- Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable;
- Use Hessian, mulches or tackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable; and
- Only remove the cover in small areas during work and not all at once.

Measures specific to construction

- Avoid scabbling (roughening of concrete surfaces) if possible;
- Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place;
- Ensure bulk cement and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery; and
- For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust.

7.1.6 Site Biosecurity

Site invasive species biosecurity protocols were developed with reference to the below best practice management guidance documents, where relevant:

- The Management of Invasive Alien Plant Species on National Roads – Technical Guidance (TII, 2020a); and
- The Management of Invasive Alien Plant Species on National Roads – Standards (TII, 2020b)

The unintentional spread of INNS into the site during construction works (within the proposed development, originating from outside the proposed development, such as through the importation of materials, poor biosecurity practices regarding plant and machinery or natural processes) can be a significant issue, and if not managed properly, can result in the spread of INNS to non-infected areas (within or adjacent to the work areas). This will potentially increase the future landscape maintenance costs; and if hazardous INNS (e.g. Giant Hogweed) were brought into the site, there would be issues in regard to public safety.

Listed below is a brief detailing of necessary measures to be undertaken to ensure biosecurity within this section of the proposed development:

- The adherence to a set of biosecurity measures, including:

- Protocols around the removal of contaminated soils; and
- Making sure all machinery entering the site is clear of INNS.

- In regard to the importation of soil and other materials, the principal contractor will only utilise traceable topsoil for landscaping that has been cleared of any invasive species.

7.1.6.1 Butterfly-bush

Due to the prevalence of small clusters of Butterfly Bush throughout the site, it is recommended that any plant material and soil from the site is manually removed and incinerated. This will also prevent the further spread of other invasive species from the site. This would be the least complicated way to prevent the spread of the species to new sites. Whilst removing the Butterfly Bush that has reached maturity, it is recommended that a large plastic bag is placed over the seed heads / flowering parts to prevent further seeds from being left on site. Due to the resilient nature of the plant, it is recommended that an active management plan is implemented for the site once developed. Manual removal of seedlings and saplings of Butterfly Bush whilst still small would be the easiest management method, however; this will require regular yearly maintenance to stop any individual plant establishing itself.

7.1.7 Noise and Vibration

The construction of the development will largely be limited to daylight hours where possible, ensuring minimum disturbance to commuting and foraging activities of local wildlife. The works will also be temporary. With regard to construction activities, reference will be made to BS 5228-1, which offers detailed guidance on the control of noise from demolition and construction activities. A variety of guidance relevant to acceptable vibration and noise levels will be followed and is contained in the following documents:

- British Standard BS 4142: 2014+A1:2019 ‘Method of Rating and Assessing Industrial and Commercial Noise’.
- British Standard BS 8233: 2014 ‘Guidance on Sound Insulation and Noise Reduction for Buildings’.
- World Health Organisation Guidelines.
- IEMA Guidelines for Noise Impact Assessment (2014)

NRA: 2014: Guidelines for the Treatment of Noise and Vibration in National Road Schemes.

7.1.8 Protection of the Dry Meadows and Grassy Verges Bank / Invertebrates – Mining Bee Habitat

The dry meadows and grassy verges bank along the eastern boundary of the site, which contains exposed soil patches and small holes potentially used by invertebrates, should be protected throughout the construction phase. This area is not scheduled for alteration under the current site plan and should remain undisturbed. To protect this habitat, protective measures should be put in place, including temporary fencing around the bank, maintaining a buffer zone free from machinery and material storage, and keeping vehicle movements away from the

habitat wherever possible. These precautions will minimise the risk of accidental damage, soil compaction, or disturbance to invertebrate microhabitats during site works.

7.1.9 General Avoidance Measures

It is advised that general avoidance measures be undertaken to protect wildlife while the works are being carried out. General avoidance measures that should be incorporated by contractors working on site include:

- Limit the hours of working to daylight hours, to limit disturbance to nocturnal and crepuscular animals (e.g. Hedgehog);
- Contractors must ensure that no harm comes to wildlife by maintaining the site efficiently and clearing away materials which are not in use, such as wire or bags in which animals can become entangled; and
- Any pipes should be capped when not in use (especially at night) to prevent local fauna becoming trapped. Any excavations should be covered overnight to prevent animals from falling and getting trapped. If that is not possible, a strategically placed plank should be placed to allow animals to escape.

7.2 Operational Mitigation

7.2.1 Operational Lighting for Bats

A range of mitigation measures have been incorporated into the lighting design to minimise potential impacts on commuting and foraging bats. As mitigation by design, all new lighting columns proposed within the site will be at a mounting height of 5m and utilise luminaires with a colour temperature of 2700K, which is less disruptive to bats. In addition, four existing lighting columns will be removed, with one replacement column also incorporating the 2700K luminaire. The remaining existing lighting columns will remain at 8m height and 4000K in accordance with DLRCC standards.

Gobo lighting will be restricted to a limited number of locations within the northern portion of the site, mainly under the bridge and new plaza areas. These lighting fixtures will be directed onto the ground, below 5m height, and should be designed to ensure that light spill does not extend beyond the site boundary. Given the proposed colour temperature of 5700K, the use of appropriate filters to reduce the colour temperature, is recommended to reduce potential impacts on bats.

7.2.2 Terrestrial Invertebrates and Habitat Management

The actions from the All-Ireland Pollinator Plan 2026-2030 will be implemented through the operation and management of the site, specifically for the grass, shrub and meadow areas around the site. Measures outlining pollinator-friendly management for councils to implement within parkland areas are detailed in the guidance document: Councils » All-Ireland Pollinator Plan (NBDC, 2066). The document outlines actions that can help enhance pollinator diversity within parkland areas where feasible, such as:

- Suitable mowing regimes for grassland areas;
- Creation of short and long grass meadows;
- Pollinator friendly planting;
- Bare earth/sand banks for wild pollinator nesting;
- For new works ensure 75% of ornamental planting is pollinator friendly;
- Provision of wild pollinator nesting habitat; and
- Eliminating or reducing the use of pesticides.

These measures will offset any short-term losses in nesting resources for terrestrial invertebrates, as well as enhancing the site's long term invertebrate diversity.

8 Residual Impacts

Residual ecological impacts are those that remain once the development proposals mitigation have been implemented. The main aim of ecological mitigation, compensation and enhancement is to minimise or eliminate residual impacts

8.1 Habitats

8.1.1 Amenity grassland (improved) [Low local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), a **long term negative residual impact that is not significant** is anticipated for this habitat.

8.1.2 Mosaic: Amenity grassland (improved) / Spoil and bare ground [Low local] and Mosaic: Amenity grassland (improved) / Ornamental/non-native shrub [Low local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), a **permanent negative impact that is not significant** is anticipated for these habitats.

8.1.3 Dry meadows and grassy verges [High local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), a **long term positive residual impact of slight significance** is anticipated for this habitat.

8.1.4 Hedgerows [High local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), a **long term positive residual impact of moderate significance** is anticipated for this habitat.

8.1.5 Treelines [High local]

Following the implementation of the construction stage ecological mitigation measures, a **long term neutral residual impact** is anticipated for this habitat.

8.1.6 Ornamental/non-native shrub [Low local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), a **long term positive residual impact of slight significance** is anticipated for this habitat.

8.1.7 Depositing/lowland rivers [High local]

Following the implementation of the construction stage ecological mitigation measures and introduction of SuDS, a **long term neutral residual impact** is anticipated for this habitat.

8.2 Fauna

8.2.1 Non-volant mammals (Hedgehog) [High local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), after **an initial short-term negative residual impact of slight significance, a long-term neutral impact** is anticipated for local Hedgehog.

8.2.2 Bats – Foraging and Commuting [High local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), a **long term negative residual impact that is not significant** is anticipated for foraging and commuting bats.

8.2.3 Breeding Birds [High local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), a **long term positive residual impact of slight significance** is anticipated for local breeding birds.

8.2.4 Amphibians [High local] and Fish [High local]

Following the implementation of the construction stage ecological mitigation measures and introduction of SuDS, a **long term neutral residual impact** is anticipated for this group.

8.2.5 Terrestrial Invertebrates [High local]

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), a **long term positive residual impact of moderate significance** is anticipated for terrestrial invertebrates.

8.3 Summary

Following the implementation of the construction and operational stage ecological mitigation measures and temporary ecological lag (maturation of landscaped habitats), it is anticipated that the proposed development will have an overall long-term positive residual ecological impact of slight significance.

9 Summary of Impact Statement

9.1 EcIA Table

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
Amenity grassland (improved)	**Construction Phase:** Habitat will be partially removed. Accidental introduction of pollutants into the habitat degrading its condition and its ability to support species associated with the habitat. **Operational Phase:** The loss of habitat will be compensated for by the newly planted grassland, shrub and tree planting. However, the tree species will take several years to establish.	Low local	Long-term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6 and 7.1.9 ensuring the protection of local habitats. **Operational Phase:** The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator friendly management of grassland areas, as well as the general operation landscape management.	**Long term negative residual impact that is not significant.**

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
Mosaic: Amenity grassland (improved) / Spoil and bare ground	**Construction Phase:** Habitat will be removed in its entirety. **Operational Phase:** Complete loss of habitat and its replacement with grassland, tree planting and hardscaping.	Low local	Short-term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6 and 7.1.9 ensuring the protection of local habitats. **Operational Phase:** The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator friendly management of grassland areas, as well as the general operation landscape management.	**Permanent negative impact that is not significant**
Mosaic: Amenity grassland (improved) / Ornamental/non-native shrub	**Construction Phase:** Habitat will be removed in its entirety. **Operational Phase:** Complete loss of habitat and its replacement with grassland, tree planting and hardscaping.	Low local	Short-term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6 and 7.1.9 ensuring the protection of local habitats. **Operational Phase:** The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator	**Permanent negative impact that is not significant**

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
				friendly management of grassland areas, as well as the general operation landscape management.	
Dry meadows and grassy verges	**Construction Phase:** Habitat will be retained fully. Accidental introduction of pollutants into the habitat degrading its condition and its ability to support species associated with the habitat. Accidental spread of INNS. **Operational Phase:** Additional meadow grassland areas proposed within the landscape plan.	High local	Short term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6 and 7.1.9 ensuring the protection of local habitats. The mitigations outlined in sub-section 7.1.8 for the protection of the dry meadow habitat. **Operational Phase:** The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator friendly management of grassland areas, as well as the general operation landscape management.	**Long term positive residual impact of slight significance**
Hedgerows	**Construction Phase:** Habitat will be retained, though with the removal of	High local	Long-term positive impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1,	**Long term positive residual impact of**

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
	some invasive species. Accidental introduction of pollutants into the habitat degrading its condition and its ability to support species associated with the habitat. Accidental spread of INNS. **Operational Phase:** Additional hedgerows are proposed along the northern and western boundary. Tree species within this habitat will take several years to reach semi-maturity.			7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6 and 7.1.9 ensuring the protection of local habitats. **Operational Phase:** The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator friendly management of grassland areas, as well as the general operation landscape management.	**moderate significance**

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
Treelines	**Construction Phase:** Habitat will be retained fully. Accidental introduction of pollutants into the habitat degrading its condition and its ability to support species associated with the habitat. **Operational Phase:** Operational phase impacts not anticipated.	High local	Short term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6 and 7.1.9 ensuring the protection of local habitats. **Operational Phase:** The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator friendly management of grassland areas, as well as the general operation landscape management.	**Long term neutral residual impact of slight significance**
Ornamental/non-native shrub	**Construction Phase:** Habitat will be partially removed. Accidental introduction of pollutants into the habitat degrading its condition and its ability to support species associated with the habitat. **Operational Phase:** Partial habitat loss will be	Low local	Short term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6 and 7.1.9 ensuring the protection of local habitats. **Operational Phase:** The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator	**Long term positive residual impact of slight significance**

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
	compensated for by the ornamental planting proposed throughout the site.			friendly management of grassland areas, as well as the general operation landscape management.	
Depositing/lowland rivers	**Construction Phase:** Habitat will be retained fully. Accidental introduction of pollutants into the habitat degrading its condition and its ability to support species associated with the habitat. **Operational Phase:** Operational phase impacts not anticipated.	High local	Short term negative impact of moderate significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6 and 7.1.9 ensuring the protection of local habitats.	**Long term neutral residual impact of slight significance**
Non-volant Mammals (Hedgehog)	**Construction Phase:** Disturbance of foraging, commuting and refuge activities during the construction phase. Accidental trappings within the construction site leading to loss of life. **Operational Phase:** Additional refuge, foraging and commuting resources introduced through the	High local	Temporary negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.1.7 and 7.1.9 ensuring the protection of local habitats and Hedgehog **Operational Phase:** None required.	**Initial short-term negative residual impact of slight significance, followed by a long-term neutral impact**

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
	proposed hedgerow and tree planting.				
Bats – Foraging and Commuting	**Construction Phase:** Loss of foraging resources during the construction phase. Construction phase lighting disturbing foraging and commuting activities. **Operational Phase:** Loss of foraging habitats offset by the creation of larger grassland areas, additional tree planting and the addition of new hedgerows. Additional artificial lighting introduced during the operational phase.	High local	Long term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.1.7, 7.1.8 and 7.1.9 ensuring the protection of local habitats. **Operational Phase:** The mitigations outlined in sub-section 7.2.1 outlining measures to reduce the impact of lighting on bats. The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator friendly management of grassland areas, as well as the general operation landscape management.	**Long term negative residual impact that is not significant**
Breeding Birds	**Construction Phase:** Disturbance of foraging and commuting activities during the construction phase.	High local	Short term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5,	**Long term positive residual impact of slight** significance

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
	Accidental introduction of pollutants into the site disrupting commuting and foraging activities, as well as causing physiological harm. **Operational Phase:** Creation of new nesting and foraging resources through additional grassland habitats and hedgerow and tree planting. The planted trees will take several years to establish.			7.1.6, 7.1.7 and 7.1.9 ensuring the protection of local habitats. **Operational Phase:** None required	
Amphibians Fish	**Construction Phase:** Accidental introduction of pollutants into the Slang River degrading its condition and its ability to support species such as Common Frog associated with the habitat as well as fish species **Operational Phase:** Operational phase impacts not anticipated.	High local	Short term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.1.7 and 7.1.9, ensuring the protection of local habitats, surface and groundwater bodies. **Operational Phase:** None required	**Long term neutral residual impact of slight significance**
Terrestrial Invertebrates	**Construction Phase:** Loss of foraging and commuting resources due to	High local	Short term negative impact of slight significance	**Construction Phase:** The mitigations outlined in sub-sections 7.1.1,	**Long term positive residual impact of**

Ecological Features	Impacts	Importance of Feature	Significance of Impact without Mitigation	Mitigation	Significance of Residual Impacts
	the removal of grassland habitats. Disturbance of foraging and commuting activities during the construction phase. Accidental introduction of pollutants into the site disrupting commuting and foraging activities, and nesting resources, as well as potentially causing physiological harm. **Operational Phase:** The loss of foraging and commuting resources will be compensated for by the landscape plan, which include hedgerow, tree and shrub planting, as well as the creation of new grassland habitats. Treeline and hedgerow habitats will take several years to establish. However, terrestrial invertebrates will still be able to forage within immature saplings.			7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.1.7 and 7.1.9 ensuring the protection of local habitats. The mitigations outlined in sub-section 7.1.8 for the protection of the dry meadow habitat. **Operational Phase:** The mitigations outlined in sub-section 7.2.2 outlining measures to promote pollinator friendly management of grassland areas, as well as the general operation landscape management.	**moderate significance**

9.2 Cumulative Impacts

As there are no significant residual impacts on ecological features (following mitigation measures) from this development, there is therefore no potential for other plans or projects identified in Section 5 to act in combination with it. Therefore, significant cumulative impacts are not expected to occur on the ecological features within the proposed site.

10 Conclusion

The proposed development has been shown to potentially impact a number of different habitats and faunal groups (Hedgehog, bats, breeding birds, amphibians, fish and invertebrates) whose ecological importance is of high local level in the context of this proposed site.

Based upon the information supplied, regarding the scope of the work site layout, landscape plan and lighting plans; and provided that the development is constructed in accordance with the mitigation measures outlined above, there will be no significant impacts alone or in-combination with other projects and plans, as result of the development and associated works on the ecology and local species of the area and on any designated conservation sites.

A Site Layout



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0 5 10 20 30 40 50mm

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LEGEND:

- EXTENT OF WORKS BOUNDARY
- PROPOSED CYCLE STANDS
- PROPOSED BIKE REPAIR STATION
- PROPOSED CONTROLLED CROSSING TACTILE PAVING
- PROPOSED UNCONTROLLED CROSSING TACTILE PAVING
- PROPOSED LOCKABLE BOLLARDS
- PROPOSED TRAFFIC SIGNAL POLE
- PROPOSED TREES
- EXISTING TREES

LEGEND - LANDSCAPE ARCHITECT:

REFER TO AIT DRAWING NO 26DR02_001 FOR PROPOSED LANDSCAPE DESIGN DETAILS

- PROPOSED PEDESTRIAN AREA
- PROPOSED GRASS VERGE / LANDSCAPING
- PROPOSED SCULPTURAL SEATING
- PROPOSED BENCH
- EXISTING MONUMENT
- PROPOSED PODIUM
- PROPOSED SUDS / RAIN GARDEN. REFER TO DBFL DWG NO: 260051-X-0500-Z00-DTM-DR-DBFL-CE-1301 DRAINAGE LAYOUT FOR PROPOSED SCHEME DRAINAGE DESIGN DETAILS

DBFL CONSULTING ENGINEERS LTD.
DRAFT
ORMOND HOUSE, UPPER ORMOND QUAY, DUBLIN 7

rev	date	description	by	chkd.
1	17-09-2026	PART VIII ISSUE	TOB	EC
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project ref.
TANEY CROSS PUBLIC REALM SCHEME, DUNDRUM

drawing title
GENERAL ARRANGMENT

client
DÚN LAOGHAIRE-RATHDOWN COUNTY COUNCIL

designed by	author	scale	sheet size
EC	TOB	1:250	A1

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260051-X-0100-Z00-DTM-DR-DBFL-CE-1201	1

B Site Landscape Plan

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L E G E N D

Hard Landscape

- Granite Paving to Coincide with DLR Living Streets Projects
- Elongated Narrow Granite Paving
- Granite Setts
- Resin Bound Gravel
- Granite Sleepers Through Planted Areas
- Existing Concrete Footpath to be Retained

Furniture+Play

- Timber Stepping Logs
- Timber Balance Beam
- Timber Seating with Back and Arm Rests
- Sculptural Seating with different functions
- Accessible Stage/Podium
- Concrete Seating Wall
- Cycle Stands
- Bike Repair Station
- Public Drinking Fountain
- Existing Usher Monument
- Lockable Socket Mounted Bollards
- Crossing Signal Poles

Soft Landscape

- Pollinator Sun Mix
- Pollinator Shade Mix
- Play Lawn + Meadow
- Sensory Planting
- SUDs Retention Basin/Rain Garden
- Existing Trees
- Proposed Medium/ Large Trees
- Proposed Small Ornamental/ Flowering Trees
- Proposed Tree Clusters
- Proposed Shrub Planting
- Proposed Low Hedge Boundary

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NOTES:

D R A F T

DATE	REV.	DESCRIPTION	DRAWN BY:	CHECKED BY:

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CLIENT: Dun Laoghaire-Rathdown County Council

PROJECT: Taney Public Realm

DRAWING: Landscape Plan

ISSUE STATUS: PLANNING

REVISION: -

DRAWING NO: 26DR01_DR-0100

DRAWN BY: MK

1st ISSUE: 18.09.2026

NORTH

PROJECT NO: 26DR01

SCALE: 1:500

SHEET SIZE: A3

CHECKED BY: DMacD

C Site Drainage Layout

PROPOSED BIOFILTRATION BASIN WITH FILTER DRAIN

MAX PONDING 300-500mm

PROPOSED TIE-IN INTO EXISTING Ø300mm uPVC STUB

PROPOSED LOW CONTROL CHAMBER WITH 75mm ORIFICE

EARTHEN CHECK FACILITY TO BE NATURALLY SHAPED WITHIN SWALE

SWALE BASE WITH SUITABLE WET-TOLERANT PLANTING AS PER LANDSCAPE ARCHITECT'S DETAIL

PROPOSED SWALE BASE OUTLET FLOW CONTROL CHAMBER WITH 75mm ORIFICE

PROPOSED OVERFLOW MANHOLES WITH BRIO GRATINGS

PROPOSED RAIN GARDEN AS PER LANDSCAPE ARCHITECT'S DETAIL

PROPOSED TREE PITS WITH OVERFLOW GULLEYS

PROPOSED RAIN GARDENS AS PER LANDSCAPE ARCHITECT'S DETAIL

PROPOSED FILTER DRAINS TO COLLECT INTERCEPTED SURFACEWATER THROUGH PERMEABLE SURFACING

PROPOSED OVERFLOW MANHOLES WITH BRIO GRATINGS

PROPOSED RAIN GARDEN AS PER LANDSCAPE ARCHITECT'S DETAIL

PROPOSED PERMEABLE RESIN BOUND GRANULAR SURFACE WITH OPEN GRADED POROUS ASPHALT BASE COURSE AS PER LANDSCAPE ARCHITECT'S DETAIL

PROPOSED CONNECTIONS TO EXISTING MANHOLES

MANHOLE LIDS TO BE RECESSED AS PER LANDSCAPE ARCHITECT'S DETAIL

EX. MH CL 45.72 IL 42.07

150Ø

300Ø 1:245

150Ø

150Ø

EX. MH CL 46.27 IL 42.29

EL: 44.870

EX. MH CL 46.08 IL 43.58

225Ø 1:170

300Ø 1:245

EX. MH CL 47.65 IL 42.52

SA-1 CL 46.64 IL 45.14

EX. MH CL 46.44 IL 44.45

EX. MH CL 47.03 IL 42.87

EX. MH CL 47.32 IL 45.56

N

W E

S

ON ORIGINAL

0 5 10 20 30 40 50mm

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SERVICES LEGEND

- PROPOSED SITE BOUNDARY
- EXISTING SURFACE WATER SEWER (S1 CL 99.99 IL 99.99)
- PROPOSED SURFACE WATER SEWER AND MANHOLE (S1 CL 99.99 IL 99.99)
- PROPOSED FILTER DRAIN
- OVERFLOW CHAMBER WITH BRIO GRATED LID
- ROAD GULLY & 150Ø LEADER
- ROAD GULLY & 150Ø LEADER
- PROPOSED SUDS CONNECTION TO TREE PIT
- PERMEABLE RESIN BOUND GRAVEL
- BIORETENTION/RAIN GARDEN
- PROPOSED SURFACE WATER SWALE WITH EARTHED CHECK DAM & GRATED MANHOLE CHAMBER
- PROPOSED BIORETENTION BASIN & GRATED MANHOLE CHAMBER
- OVERLAND FLOW ROUTE

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rev	date	description	by	chkd.
1	17-09-26	ROUND 2 ISSUE	TOB	GPH
0	28-07-2026	PART VIII ISSUE	TOB	GPH

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TANEY CROSS PUBLIC REALM SCHEME, DUNDRUM

drawing title

DRAINAGE LAYOUT

client

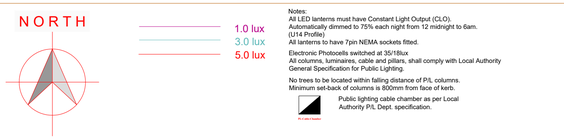
DÚN LAOGHAIRE-RATHDOWN COUNTY COUNCIL

designed by	author	scale	sheet size
GPH	PCJ	1:200	A1

drawing no. 260051-X-0500-Z00-DTM-DR-DBFL-CE-1301 revision 1

D Site Lighting Plan





Notes:
All LED lanterns must have Constant Light Output (CLO).
Automatically dimmed to 75% each night from 12 midnight to 6am.
(U14 Profile)
All lanterns to have 7pin NEMA sockets fitted.

Electronic Photocells switched at 35/18lux
All columns, luminaires, cable and pillars, shall comply with Local Authority General Specification for Public Lighting.

No trees to be located within falling distance of P/L columns.
Minimum set-back of columns is 800mm from face of kerb.

Public lighting cable chamber as per Local Authority P/L Dept. specification.

Urbis Schreder Valinta GOBO projector - 28 Watt

GOBO Projection Options (To be selected at time of order)

- Projection 7049 (30) at 40
- Projection 7050 (25) at 40
- Projection 7051 (17) at 40

GOBO pattern to be selected by others.

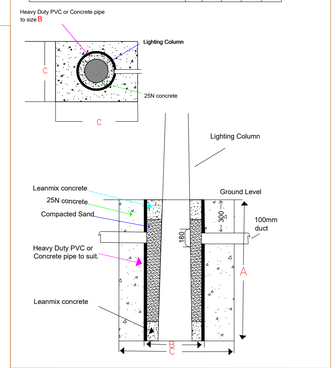
- Luminaire A LUNOV00-N-D24-727-L045-ST-V1-F06-M2-Colour TBC
  30 Watt. Bracket style TBC.
  5m Column. Qty 3
  5m R&L Column. Qty 1
- Luminaire B LUNOV00-N-D22-727-L035-ST-V1-F06-M2-Colour TBC
  24 Watt. Bracket style TBC.
  5m Std Column. Qty 5
  5m R&L Column. Qty 3
- Luminaire C BGP292 DW50 740 10klm
  Existing LED Luminaire, estimated photometry.
- Luminaire D Abbey 5267 16 LED@ 300mA 740 16.1W
  Existing LED Luminaire, estimated photometry.
- Luminaire E CIVITEQ S - 24 x 4000K LED 350mA - NR Optic
  Existing LED Luminaire, estimated photometry.
- Luminaire F AMPERA MIDI 5139-48 @500mA NW
  Existing LED Luminaire, estimated photometry.
- LP Existing Public lighting Location

2X6sq NYCY cable laid in ducting to I.S.10101:2020.
Single wall ducting, colour red to be used
manufactured from high density polyethylene (H.D.P.E.).
107mm external diameter, having a wall thickness of 5mm.
This ducting to have the words "Street Lighting" stamped on
to be clearly legible at 1m intervals. The lettering to face uppermost
in the trench. All works to Local Authority specification.
This is a circuit layout and not indicative of where ducts are to be laid.

Public Lighting Pillar (located at least 2m from ESB pillar)

Typical Base detail, to be checked by site engineers.

COLUMN MOUNTING HEIGHT		12m	10m	8m	6m
COLUMN ROOT DEPTH	A	1.9m	1.7m	1.5m	1.0m
CABLE ENTRY DEPTH		0.3m	0.3m	0.3m	0.3m
ROOTING CONCRETE DEPTH					
COLUMN DOOR HEIGHT		1.5m	1.5m	1.5m	1.5m
COLUMN SLEEVE SIZE(mm) internal	B	450	400	400	300
EXCAVATION (width x length)	C	1000	800	600	400



NOTES

THIS DRAWING IS THE INTELLECTUAL PROPERTY OF Sabre LIGHTING DESIGN DEPT. AND IS COPYWRIGHT © AND CAN NOT BE USED WITHOUT PRIOR CONSENT.

NO ACCOUNT IS TAKEN FOR THE BLOCKING EFFECT CAUSED BY BUILDINGS, TREES ETC. THE CALCULATION SHOWN BY THIS DRAWING ASSUMES THAT THE WHOLE AREA BEING CONSIDERED IS IN THE SAME PLANE, I.E. THERE ARE NO CHANGES IN GRADIENT OR ELEVATION.

This drawing layout is based on calculated lighting levels, produced by Sabre Electrical Services Ltd., using Lighting Reality software. Any alterations to the layout or luminaire type used for the lighting design calculations, will require a revised lighting design to be carried-out. A redesign may require approval from the Local Authority Public Lighting Dept. prior to any alterations/modifications being implemented on site.

Sabre
ELECTRICAL SERVICES LTD.
Specialist Contractors
PUBLIC LIGHTING - FLOOD LIGHTING - SPORTS LIGHTING - ESB DUCT PROVING

UNIT 11,
BELLVUE INDUSTRIAL ESTATE,
FINGLAS,
DUBLIN 11.
E - MAIL: design@sabrelighting.ie
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REV	DESCRIPTION	INITS	CHK'D	DATE
-	?	GS	CHK	----------
-	?	GS	CHK	----------
-	?	GS	CHK	----------
-	?	GS	CHK	----------
C	Proposed colour temp to 2700K & GOBO added	AN	CHK	02-11-26
B	Updated landscape layout	AN	CHK	16-10-26
A	Updated as per comments & requested LED luminaire used	AN	CHK	31-07-26

CLIENT/CUSTOMER
DBFL

PROJECT
Taney Cross

TITLE
Public Lighting Layout

DRAWN	SCALE	DATE
AN	1:250@A1	04-07-26

DRAWING NUMBER	ISSUE
SES 07626	4

BASE DRAWING NUMBER

DRAWING ORIGIN

DO NOT SCALE FROM THIS DRAWING

E NBDC Records

E.1 Protected species recorded within 2km of the site within the last 10 years

Species name	Date of last record	Designation
Amphibians		
Common Frog *Rana temporaria*	08/05/2018	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts
Smooth Newt *Lissotriton vulgaris*	06/10/2020	Protected Species: Wildlife Acts
Birds		
Black-headed Gull *Chroicocephalus ridibundus*	17/12/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Common Gull *Larus canus*	04/11/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Common Sandpiper *Actitis hypoleucos*	02/08/2018	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Coot *Fulica atra*	17/12/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Cormorant *Phalacrocorax carbo*	17/12/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds

Species name	Date of last record	Designation
		Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Curlew *Numenius arquata*	08/11/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Gadwall *Mareca strepera*	21/02/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Goldcrest *Regulus regulus*	21/02/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Golden Plover *Pluvialis apricaria*	29/10/2018	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Great Spotted Woodpecker *Dendrocopos major*	07/08/2023	Protected Species: Wildlife Acts

Species name	Date of last record	Designation
Greenfinch *Chloris chloris*	09/12/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Grey Wagtail *Motacilla cinerea*	22/09/2025	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Herring Gull *Larus argentatus*	26/12/2024	Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
House Martin *Delichon urbicum*	23/08/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
House Sparrow *Passer domesticus*	26/12/2024	Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Kingfisher *Alcedo atthis*	20/09/2025	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Lapwing *Vanellus vanellus*	15/12/2022	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List

Species name	Date of last record	Designation
Lesser Black-backed Gull *Larus fuscus*	17/12/2024	Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Linnet *Linaria cannabina*	19/12/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Little Egret *Egretta garzetta*	26/12/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species
Little Grebe *Tachybaptus ruficollis*	05/09/2023	Protected Species: Wildlife Acts
Mallard *Anas platyrhynchos*	26/12/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Meadow Pipit *Anthus pratensis*	04/11/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Mediterranean Gull *Ichthyaetus melanocephalus*	25/08/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Merlin *Falco columbarius*	13/03/2023	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds

Species name	Date of last record	Designation
		of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Mistle Thrush *Turdus viscivorus*	17/12/2024	Protected Species: Wildlife Acts
Mute Swan *Cygnus olor*	17/12/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Oystercatcher *Haematopus ostralegus*	12/12/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Pochard *Aythya ferina*	19/03/2019	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Red Kite *Milvus milvus*	12/05/2023	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Redshank *Tringa totanus*	20/01/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Redwing *Turdus iliacus*	12/12/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation

Species name	Date of last record	Designation
		Concern >> Birds of Conservation Concern - Red List
Robin *Erithacus rubecula*	15/01/2025	Protected Species: Wildlife Acts
Rock Dove *Columba livia*	26/12/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species
Sand Martin *Riparia riparia*	02/07/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Shag *Gulosus aristotelis*	18/05/2023	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Skylark *Alauda arvensis*	14/11/2018	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Snipe *Gallinago gallinago*	07/10/2018	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Snowy Owl *Bubo scandiacus*	08/04/2016	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Sparrowhawk *Accipiter nisus*	08/04/2016	Protected Species: Wildlife Acts

Species name	Date of last record	Designation
Spotted Flycatcher *Muscicapa striata*	22/05/2025	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Starling *Sturnus vulgaris*	26/12/2024	Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Stock Dove *Columba oenas*	14/05/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Swallow *Hirundo rustica*	27/09/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Swift *Apus apus*	28/08/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Teal *Anas crecca*	29/01/2023	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Tufted Duck *Aythya fuligula*	17/12/2024	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds

Species name	Date of last record	Designation
		of Conservation Concern >> Birds of Conservation Concern - Amber List
Whooper Swan *Cygnus cygnus*	05/12/2020	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Wigeon *Mareca penelope*	18/12/2021	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Willow Warbler *Phylloscopus trochilus*	15/09/2024	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Woodcock *Scolopax rusticola*	22/11/2019	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Invertebrates		
Buffish Mining Bee *Andrena nigroaenea*	24/04/2022	Threatened Species: Vulnerable
Moss Carder Bee *Bombus muscorum*	26/08/2018	Threatened Species: Near threatened
Red-tailed Bumblebee *Bombus lapidarius*	04/08/2023	Threatened Species: Near threatened

Species name	Date of last record	Designation
Tawny Mining Bee *Andrena fulva*	04/04/2019	Threatened Species: Regionally Extinct
Terrestrial Mammals		
Badger *Meles meles*	29/09/2016	Protected Species: Wildlife Acts
Hedgehog *Erinaceus europaeus*	05/07/2023	Protected Species: Wildlife Acts
Otter *Lutra lutra*	19/09/2017	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex II || Protected Species: EU Habitats Directive >> Annex IV || Protected Species: Wildlife Acts
Pine Marten *Martes martes*	31/05/2021	Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts

E.2 Invasive species recorded within 2km of site within the last 10 years

Species	Date of last record	Designation
Birds		
Mandarin Duck *Aix galericulata*	18/02/2018	Invasive Species: The Wildlife (Northern Ireland) Order 1985
Flora		
Butterfly-bush *Buddleja davidii*	30/01/2023	Invasive Species: Medium Risk Invasive Species (2013 Report)
Cherry Laurel *Prunus laurocerasus*	04/04/2023	Invasive Species: High Risk Invasive Species (2013 Report)
Himalayan Balsam *Impatiens glandulifera*	11/07/2025	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: Detailed Risk Assesment || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: Detailed Risk Assesment >> High Risk
Himalayan Honeysuckle *Leycesteria formosa*	04/09/2021	Invasive Species: Medium Risk Invasive Species (2013 Report)
Japanese Knotweed *Fallopia japonica*	20/07/2021	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: The Wildlife (Northern Ireland) Order 1985
Spanish Bluebell *Hyacinthoides hispanica*	30/03/2021	Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: The Wildlife (Northern Ireland) Order 1985
Sycamore *Acer pseudoplatanus*	20/07/2021	Invasive Species: Medium Risk Invasive Species (2013 Report)

Species	Date of last record	Designation
Three-cornered Garlic *Allium triquetrum*	13/05/2024	Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: Detailed Risk Assesment || Invasive Species: Medium Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: Detailed Risk Assesment >> Moderate Risk
Invertebrates		
New Zealand Flatworm *Arthurdendyus triangulatus*	02/05/2025	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: High Risk Invasive Species (2013 Report)
Harlequin Ladybird *Harmonia axyridis*	28/10/2025	Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland)
Oak Processionary *Thaumetopoea processionea*	30/06/2020	Invasive Species: High Risk Invasive Species (2013 Report)
Mollusc		
Jenkins' Spire Snail *Potamopyrgus antipodarum*	30/09/2016	Invasive Species: Medium Risk Invasive Species (2013 Report)
Zebra Mussel *Dreissena polymorpha*	19/01/2024	Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: The Wildlife (Northern Ireland) Order 1985
Terrestrial Mammal		
American Mink *Neovison vison*	28/06/2025	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I.

Species	Date of last record	Designation
		477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Invasive Species: The Wildlife (Northern Ireland) Order 1985
Brown Rat *Rattus norvegicus*	30/09/2016	Invasive Species: High Risk Invasive Species (2013 Report)
Grey Squirrel *Sciurus carolinensis*	08/01/2023	Invasive Species: EU Invasive Alien Species Regulation No. 1143/2014 || Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: High Risk Invasive Species (2013 Report) || Invasive Species: Regulation S.I. 374/2024 (Ireland)

F Relevant Policy and Legislation

The legislation discussed below is intended as a guide only and does not replace formal legal advice.

F.1 Biodiversity Policy Guidance

'Biodiversity: The National Biodiversity Action Plan 2017-2021 (DCHG, 2017) sets out actions through which a range of government, civil and private sectors will undertake to achieve Ireland's 'Vision for Biodiversity' and has been developed in response to The Earth Summit, held in Rio de Janeiro in 1992 (UN Convention on Biological Diversity) and subsequent EU and International Biodiversity strategies and policies.

As part of the Action Plan process Local Authorities (LA) must produce Biodiversity Action Plans (BAP). BAPs highlight local biodiversity issues and set out a series of objectives and action plans for the conservation of priority species and habitats where they occur in each district or county.

F.2 Designated Sites and Nature Conservation

F.2.1 Statutory Designated Nature Conservation Sites

Sites with statutory designations receive varying degrees of legal protection under Irish statute (i.e. Wildlife Act 1976 and Wildlife (Amendment) Act (2000) and European Directives (i.e. the EC Birds Directive (2009/147/EC) and EC Habitats Directive (92/43/EC). The EU directives were transposed into Irish national law and subsequent amendments were revised and consolidated in the European Communities (Birds and Natural Habitats) Regulations 2011 and Irish Statutory Instrument 477/2011

There are a number of statutory designations used for sites of high nature conservation value in Ireland, which are applied depending upon the importance of the site in a local, regional, national or international context. These include:

- National
- Natural Heritage Area (NHA)
- Wildfowl Sanctuary
- Statutory Nature Reserve
- Refuge for Fauna
- European
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)
- International
- UNESCO Biosphere Reserve
- Ramsar Convention Site
- National Park (Category II) Sites

F.2.2 Non-Statutory Designations

Non-statutory sites are afforded no statutory legal protection, but are normally recognised by local planning authorities and statutory agencies as being of local nature conservation value

A proposed Natural Heritage Area (pNHA) is an area deemed to be of special interest containing important wildlife habitat and often containing rare or threatened species. They may also be selected on the basis of their geology or geomorphology.

F.2.3 Protected and Notable Species

A number of species are protected under Irish and international legislation. In Ireland, primary protection is provided under the 1976 Wildlife Act and Wildlife (Amendment) Acts (2000 & 2010) and revision 2018. Species of European importance receive additional protection in Ireland under the Birds and Natural habitats Regulations 2011.

The Flora (Protection) Order (2022) makes it illegal to cut, uproot or damage a listed species in any way. It is illegal to alter, damage or interfere in any way with their habitats.

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