
Preliminary Ecological Appraisal
Social Housing Bundle 5, Development
at Basin View, The Liberties, Dublin 8

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Executive Summary

This document has been prepared by NM Ecology Ltd on behalf of Dublin City Council regarding a proposed residential development at Basin View, The Liberties, Dublin 8. The proposed development will involve the demolition of four existing apartment buildings, the construction of two new buildings, and renovation of the existing Basin Lane apartment building. These structures will contain 171 apartments, a creche, community / culture / arts space, and associated infrastructure. The aim of this document is to identify any important ecological features at the proposed development site (hereafter referred to as 'the Site'), as part of a broader due-diligence process.

The Site is not within or adjacent to any designated sites. Designated sites in the surrounding area were reviewed, but none are connected by surface water (or other) pathways, so any risk of indirect impacts can be ruled out. A *Screening for Appropriate Assessment* report accompanies the application, in which it was concluded that the proposed development will not be likely to have a significant effect on any European sites.

Habitats within the Site include buildings and artificial surfaces, treelines, scrub, amenity grassland and dry meadow. All are of negligible botanical importance and pose no constraint to the proposed development. No rare flora or invasive plant species were recorded. Native trees and shrubs will be planted as part of the landscaping scheme, as well as some other biodiversity enhancement measures, which are likely to result in a net gain in the biodiversity value of the Site.

The Site does not contain any suitable habitat for otters, badgers, hedgehogs or other protected mammals. A bat survey was carried out, but the Site was concluded to have negligible value for roosting or foraging bats, due primarily to the extent of artificial lighting within and surrounding the Site. Some common and widespread bird species were recorded at the Site, but no species of conservation importance. Birds could potentially nest on the roofs of existing buildings and / or in existing trees, so on a precautionary basis it is recommended that demolitions and tree felling takes place outside the nesting season, or that a survey for nesting birds is carried out.

In summary, we have only identified one important ecological feature (nesting birds) at the site, which can be addressed using standard best practice measures. Landscaping proposals are expected to result in a net gain in the biodiversity value of the Site. No further ecological surveys or assessments are required. This document should be included in the planning application to demonstrate due diligence on ecological matters.

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1 Introduction

1.1 Assessment brief

NM Ecology Ltd was engaged to carry out a Preliminary Ecological Appraisal (PEA) of a proposed development site at Basin View, The Liberties, Dublin 8. The proposed development will involve the demolition of 4 no. existing apartment buildings, the renovation of an existing apartment building, and the construction of two new buildings.

The aim of this assessment is to identify any important ecological features that could potentially be affected by future development, as part of a broader due-diligence process. It has been prepared in accordance with the *Guidelines for Preliminary Ecological Appraisal* (2017) published by the Chartered Institute of Ecology and Environmental Management (CIEEM). The report concludes with a review of potential ecological considerations, and (if required) recommendations for further survey or assessment. If no ecological impacts are identified and no further surveys are required, the PEA can be submitted as part of a planning application to demonstrate due diligence. Where impacts are identified and / or further survey is required, the PEA can be adapted into an Ecological Impact Assessment.

1.2 Statement of authority

All surveying and reporting was carried out by Nick Marchant, the principal ecologist of NM Ecology Ltd. He has sixteen years of professional experience, including thirteen years as an ecological consultant, one year as a local authority biodiversity officer, and two years managing an NGO in Indonesia. He provides ecological assessments for developments throughout Ireland and Northern Ireland, including wind farms, infrastructural projects (roads, water pipelines, greenways, etc.), and a range of residential and commercial developments.

He has an MSc in Ecosystem Conservation and Landscape Management from NUI Galway and a BSc in Environmental Science from Queens University Belfast. He is a member of the Chartered Institute of Ecology and Environmental Management, and operates in accordance with their code of professional conduct.

2 Methods

2.1 Scoping

The aim of this assessment is to identify any ecological features that may be affected by the proposed development. It involves the following steps:

- Identification of designated sites within an appropriate zone of influence
- A walkover survey incorporating the following elements:
 - Classification and mapping of habitats

- A search for rare or protected flora, and for any legally-restricted non-native plant species (e.g. Japanese Knotweed)
- A search for field signs of rare or protected fauna (e.g. badgers, bats), and habitat suitability assessments for species that are shy, nocturnal or seasonal
- Valuation of ecological features and review of legal considerations
- Identification of potential ecological impacts
- Recommendations for mitigation measures or follow-up surveys

2.2 Data collection and walkover survey

A desk-based scoping study was carried out using data from the following sources:

- Plans and specifications for the proposed development
- Bedrock, soil, subsoil, ground water and surface water maps from the Geological Survey of Ireland webmapping service, the National Biodiversity Data Centre, and the Environmental Protection Agency web viewer
- Maps and details of designated sites from www.npws.ie

The following resources were used for the walkover surveys:

- Habitat surveys were carried out in accordance with the *Best Practice Guidance for Habitat Survey and Mapping* (Smith et al 2011), and using the classification system of *A Guide to the Habitats of Ireland* (Fossitt 2000)
- Flora were identified using *New Flora of the British Isles, 3rd Edition* (Stace 2010), and *The Vegetative Key to the British Flora* (Poland & Clement 2009). Nomenclature follows the plant crib of the Botanical Society of the British Isles (BSBI 2007). The abundance and extent of species is described using the DAFOR scale (Dominant, Abundant, Frequent, Occasional, Rare)
- Fauna surveys followed the methods outlined in the *Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes* (NRA 2006), with reference to other species-specific methods as appropriate.

Desktop data from internet resources was accessed in March 2024, a multi-disciplinary survey was carried out on 5 July 2023, and a bat survey on 23 August 2023.

Bat survey

Survey methods were developed using *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Bat Conservation Trust, 3rd edition, 2016). It is noted that the 4th edition of the guidance was published in October 2023, but the survey had already been completed by that time, so it was undertaken in accordance with the 3rd edition guidance.

Five buildings of low suitability for roosting bats were identified during an initial inspection of the Site. The recommended survey effort in the Bat Conservation Trust guidelines for buildings of low suitability is one emergence or re-entry survey. A re-entry survey was

undertaken on 23 August 2023 by a team of three surveyors. Weather conditions were ideal for bats: air temperatures of 16 °C and no wind or rain.

2.3 Valuation of ecological features

Based on the information collected during the desktop and walkover surveys, the ecologist assigns an ecological importance to each feature based on its conservation status at different geographical scales (Table 1). For example, a site may be of national ecological importance for a given species if it supports a significant proportion (e.g., 5%) of the total national population of that species, or if it is designated as a Natural Heritage Area.

It is accepted that any development will have an impact on the receiving environment, but the significance of the impact will depend on the importance of the ecological features that would be affected. The following is outlined in the CIEEM guidelines: *“one of the key challenges in an EclA is to decide which ecological features (habitats, species, ecosystems and their functions/processes) are important and should be subject to detailed assessment. Such ecological features will be those that are considered to be important and potentially affected by the project. It is not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to impacts from the development, and that will remain viable and sustainable.”*

Table 1: The six-level ecological valuation scheme used in the CIEEM guidelines (2018)

Ecological importance	Geographical scale of importance
International	International or European scale
National	The Republic of Ireland or the island of Ireland
Regional	Leinster, and/or the east midlands of Ireland
County	County Dublin
Local	Urban / suburban areas in Dublin 8
Negligible	None, the feature is common and widespread

For the purposes of this report, we pay greatest attention to ecological features that are of Local importance or higher, or those that receive legal protection. These features are termed ‘important ecological features’ and are listed in Section 3.6. Features of Negligible ecological importance (e.g., amenity grasslands) do not pose any constraint to development.

3 The Receiving Environment

3.1 Environmental setting

The proposed development site (hereafter referred to as ‘the Site’) covers an existing social housing development known as ‘Basin View Flats’. It consists of 5 no. 5-storey apartment

buildings (currently occupied), parking areas and communal open space. There are lines of trees in the north, west and south of the Site.

St James Hospital is located to the west of the Site, there are a number of schools to the south, and housing to the north and east. The broader surroundings include a broad mixture of residential, commercial, industrial (Guinness Storehouse) and community facilities.

Geology and soils

The underlying bedrock is limestone (subcategorised as 'dark limestone and shale' on the GSI database), which is a locally-important aquifer. Subsoils are limestone till, and soils are made ground.

Hydrology

There are no watercourses in the vicinity of the Site. Rainfall on buildings and artificial surfaces is collected in an artificial drainage network and discharged to a local authority storm drain. Rainfall on green areas soaks to ground in-situ.

The closest watercourse on the EPA database of rivers and streams is the River Camac, which is approx. 350 m north-west of the Site. It has no connection to the Site. The River Poddle is also located approx. 900 m east of the Site, but it passes under the city centre in a lengthy culvert, so it also has no connection to the Site.

In summary, the Site has no connection to any watercourses.

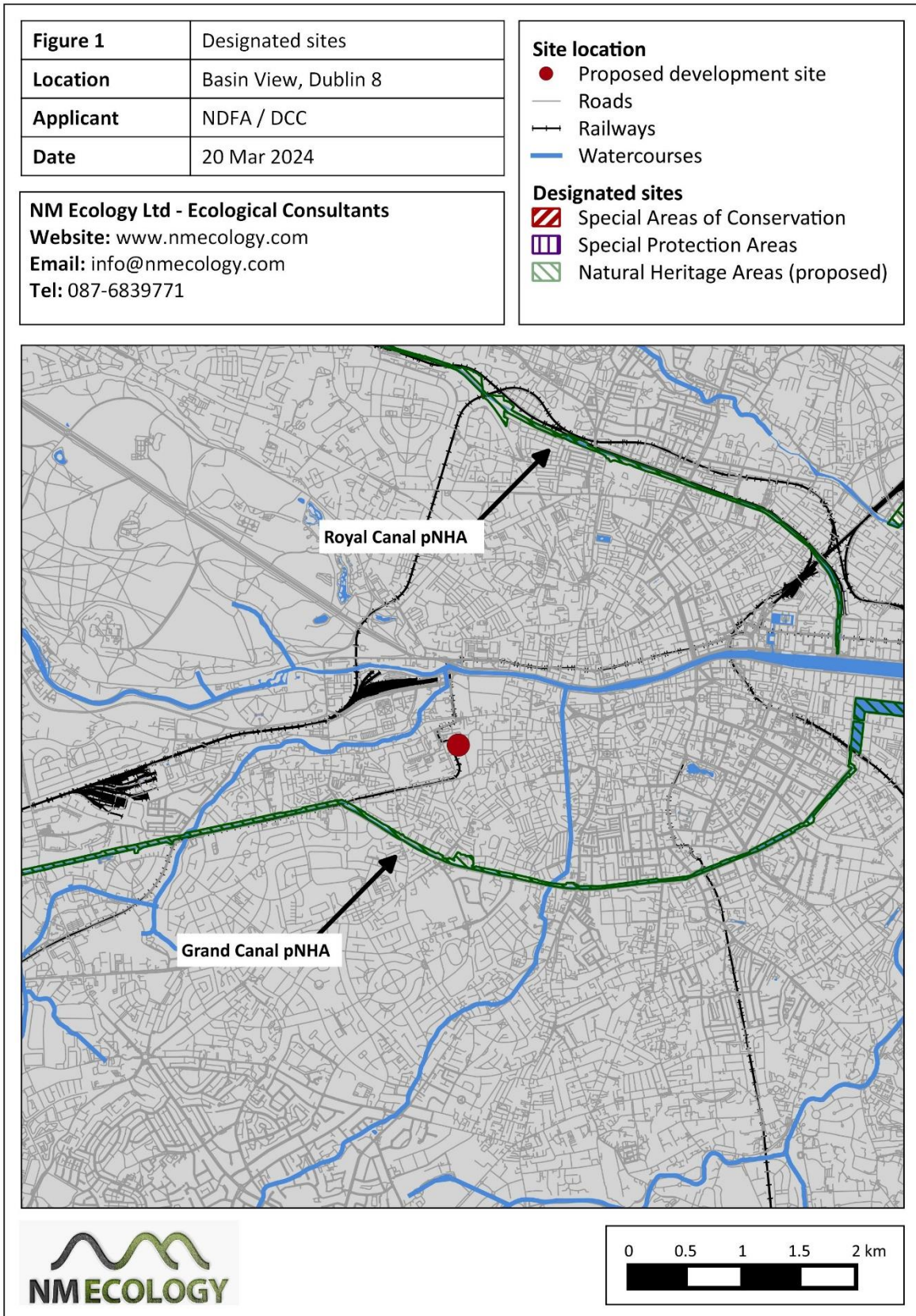
3.2 Designated sites

A map of designated sites in the surrounding area is provided in Figure 1, and details are provided in Table 2.

Table 2: Designated sites shown in Figure 1

Site Name	Distance	Reasons for designation
Grand Canal pNHA (2104)	0.7 km south	Extensive freshwater feature of value to a range of biodiversity, and with value as an ecological corridor
Royal Canal pNHA (site code 2103)	2.0 km north-east	Extensive freshwater feature of value to a range of biodiversity, and with value as an ecological corridor

The Site is not within or adjacent to any designated sites, so there is no possibility of direct effects. There are no surface water pathways linking the Site to any of the designated sites in Table 2, so there is no possibility of indirect effects. Distances are too great for impacts via groundwater, land or air. Therefore, the proposed development will have no impact on any designated sites.



3.3 Habitats and flora

Habitats recorded within the Site are discussed below, using the habitat classification system of *A Guide to Habitats in Ireland* (Fossitt 2000). A habitat map is not provided, because the distribution and extent of habitats can readily be discerned from aerial photography.

3.3.1 Phase 1 habitat survey

A large proportion of the Site consists of buildings and artificial surfaces (BL3). There are 5 existing 5-storey apartment buildings, which have masonry walls and concrete roofs. There are internal roads and parking spaces to the north of each building. There is an asphalt soccer pitch in the north of the Site, a basketball court with an artificial surface in the west of the Site, and a number of playgrounds with artificial surfaces. None of these areas support any vegetation, and they are of no ecological importance.

There are treelines (WL2) in the north, west and south of the Site, almost all of which are composed of non-native species. A line of large-leaved lime *Tilia platyphyllos* and small-leaved lime *Tilia cordata* is located in the north-east of the Site along the eastern side of the soccer pitch adjoining Basin View Road. There are lines of sycamores *Acer pseudoplatanus* along the western side of the soccer pitch, and along parts of the south-western boundary, and there is a mixed line of sycamore and ash *Fraxinus excelsior* on the southern boundary. The majority of trees are of non-native species, and the habitat has no woodland ground flora, so it is of Negligible importance.

There are small patches of scrub (WS1) at various locations throughout the Site, including the north-western boundary and to the north and south of the soccer pitch. These areas include butterfly-bush *Buddleja davidii*, bramble *Rubus fruticosus* ag. and immature sycamore. This habitat is localised and consists of common species, so it is of Negligible importance.

Most other green space within the Site consists of amenity grassland (GA2), including underneath the trees. These areas are mowed regularly during summer months. They are dominated by perennial rye-grass *Lolium perenne*, Yorkshire-fog *Holcus lanatus*, creeping buttercup *Ranunculus repens* and white clover *Trifolium repens*. This habitat is common in urban areas, and of Negligible importance.

There are some localised patches of dry meadow (GS2) in unmowed areas. Species that are dominant or abundant include hogweed *Heracleum sphondylium*, yarrow *Achillea millefolium*, mallow *Malva* sp., false oat-grass *Arrhenatherum elatius*, great willowherb *Epilobium hirsutum* and nettle *Urtica dioica*. These species are common and widespread in urban areas, and the habitat is of Negligible importance.

In summary, all habitats within the Site are of Negligible ecological importance.

3.3.2 *Rare or protected flora*

No rare or protected plants were encountered.

3.3.3 *Invasive plant species*

No Japanese Knotweed *Fallopia japonica* or any other invasive plant species listed on the third schedule of the *European Communities (Birds and Natural Habitats) Regulations 2011* were recorded within the Site.

3.4 **Protected species**

3.4.1 *Terrestrial mammals*

No field signs of any protected mammals were observed during the site inspection. There are no watercourses suitable for otters, nor ground vegetation suitable for badgers, hedgehogs, etc. Therefore, the Site is of Negligible importance for any protected mammal species.

3.4.2 *Bats*

Bats are common and widespread in Ireland. During the day they roost in buildings, bridges and mature trees. At night they forage around wetlands (lakes, rivers, swamps), woodland and hedgerows. They typically avoid urban areas (particularly areas with artificial lighting) and open habitats such as grasslands.

Potential roost features

The existing buildings are 5 storeys in height, and constructed of masonry walls, with pitched roofs of concrete tiles and projecting concrete awnings. No obvious crevices or cavities were observed in the structures, but there may be shallow crevices under roof tiles, so they were considered to have low suitability for roosting bats.

The trees are semi-mature, and do not have any cavities or crevices suitable for roosting bats.

Re-entry survey (23 August)

The recommended survey effort in the Bat Conservation Trust guidelines (Collins et al. 2016) for buildings of low suitability for roosting bats is one emergence or re-entry survey. To achieve this, a re-entry survey was undertaken at dawn on 23 August. A team of three surveyors was used to provide views of all sides of the buildings. Weather conditions were ideal for a bat survey, with an air temperature of 16 °C and no wind or rain.

Only a single bat was recorded during the survey: one common pipistrelle passed through the Site flying from St James' Hospital towards St James' Avenue. It did not interact with any of the buildings and did not forage within the Site, it was simply 'commuting' through the Site.

The low level of bat activity is likely to be explained by the prevalence of artificial lighting within and surrounding the Site. Bats typically avoid areas with high levels of artificial lighting, as it exposes them to predation. All car parks within the Site have floodlighting, and there are streetlights along the northern and eastern boundaries of the Site.

Evaluation

No bats were observed roosting within any of the buildings, nor any bats foraging within the green areas. Therefore, the Site is of Negligible importance for bats.

3.4.3 *Birds*

Some of the birds associated with SPAs in Dublin Bay fly inland to feed on amenity grasslands (sports pitches, urban parks) throughout the city. This is particularly common in brent geese but is also seen to a lesser extent in oystercatchers, curlews and black-tailed godwits. They favour large open areas that provide a good field of view of potential predators, and are usually only recorded on sites measuring at least the size of a football pitch (0.7 ha). There are some small patches of amenity grassland within the Site, but none are larger than 0.1 ha, and all are surrounded by tall buildings or trees. Therefore, the Site is unsuitable for brent geese or any other species associated with the SPAs in Dublin Bay.

The following species were recorded during the site inspection: feral pigeon, herring gull, black-headed gull, jackdaw, magpie and wren. The site may be used by other common urban species (gulls, corvids) and garden birds (finches, tits), but is unlikely to be used by any species of conservation importance. Therefore, the Site is of Negligible importance for bird species.

Gulls often nest on the roofs of buildings in urban areas, and are known to use the roofs of buildings around the Guinness Storehouse to the east of the Site. It was not possible to inspect the roofs of any buildings within the Site for nesting birds, so on a precautionary basis it will be assumed that some species nest on the roof. It is also likely that other bird species nest in the trees within the Site. On a precautionary basis it will be assumed that the Site is of Local importance for nesting birds.

3.4.4 *Fish and aquatic fauna*

There are no waterbodies within the Site, so it is of no importance for fish or other aquatic fauna.

3.4.5 *Reptiles and amphibians*

No reptiles or amphibians were observed during the survey, nor any ponds or other permanent wetland features suitable for breeding. Therefore, the Site is of no importance for these taxa.

3.4.6 *Terrestrial invertebrates*

The habitats within the Site are common in urban landscapes in Ireland, so the site is of Negligible importance for invertebrates.

3.5 Potential limitations and information gaps

The multi-disciplinary site inspection was carried out in July 2023 and the bat survey in August 2023. These are ideal times for ecological surveys.

As noted in Section 2.2, the bat survey methods were developed using *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Bat Conservation Trust, 3rd edition, 2016). The 4th edition of the guidance was published in October 2023, but the survey had already been completed by that time, so it was undertaken in accordance with the 3rd edition guidance. This does not provide any limitation to the survey, as the 3rd edition guidance represented best practice at the time.

3.6 Identification of Important Ecological Features

Table 3 provides a summary of all ecological features identified within the Site, including their importance and legal / conservation status. For the purposes of this impact assessment, any features that are of Local (or higher) ecological importance are considered to be 'Important Ecological Features'.

Table 3: Important ecological features within the Site

Ecological feature	Importance	Legal status	Important feature?
Designated sites	National	WA	No
Buildings and artificial surfaces (BL3)	Negligible	-	No
Treelines (WL2)	Negligible	-	No
Scrub (WS1)	Negligible	-	No
Amenity grassland (GA2)	Negligible	-	No
Dry meadow (GS2)	Negligible	-	No
Rare / protected flora	N.A.	-	No
Invasive plant species	N.A.	-	No
Terrestrial mammals	Negligible	WA	No
Bats	Negligible	HR, WA	No
Birds associated with SPAs	Negligible	WA	No
Nesting birds	Local	WA	Yes
Fish and aquatic fauna	N.A.	WA	No

Ecological feature	Importance	Legal status	Important feature?
Reptiles and amphibians	Negligible	-	No
Invertebrates	Negligible	-	No

* HR – European Communities (Birds and Natural Habitats) Regulations 2011 (as amended); WA - protected under Section 19 or 20 of the Wildlife Act 1976 (as amended)

4 Evaluation and Recommendations

The only Important Ecological Features identified in Table 3 is nesting birds. Impacts on nesting birds can be avoided using best practice mitigation; this is discussed in Section 4.1. All other ecological features discussed in Section 3 are considered to be of Negligible ecological importance, so they do not require further assessment.

Policy GI 16 of the Dublin City Development Plan requires that “opportunities should be taken as part of new development to provide a net gain in biodiversity and provide links to the wider Green Infrastructure network”. Ecological enhancement measures for the scheme are reviewed in Section 4.2, and potential net gain in biodiversity is considered.

4.1 Protection of treeline and nesting birds

Birds may nest on the roof of the existing apartment buildings and / or in existing trees throughout the Site. Under Section 22 of the *Wildlife Act 1976* (as amended), it is an offence to kill or injure a protected bird or to disturb their nests. It is recommended that demolition and tree-felling works take place between September and February (inclusive), i.e. outside the nesting season. If this is not possible, an ecologist will survey the affected areas in advance to assess whether or not any nesting birds are present. If any are encountered, vegetation clearance will be delayed until the breeding attempt has been completed, i.e. after chicks have fledged and a nest has been abandoned.

4.2 Biodiversity Enhancement and Net Gain

As discussed in Section 3, all habitats within the Site are currently of Negligible importance. Existing buildings, artificial surfaces and amenity grassland will be cleared to make space for the proposed development.

The landscaping proposals for the scheme will create green areas within the Site, notably in Oisín Kelly Park. The following measures are shown in the landscape plan:

- New trees and shrubs will be planted in areas of communal and public open space, including a number of native species
- Detention basins and swales will temporarily hold water during periods of high rainfall. Wetland plants are expected to colonise these areas

- Bird boxes will be provided, including swift nesting boxes on a westerly elevation of Blocks A and C. A range of designs suitable for common garden birds (e.g. finches, tits, blackbirds) will be provided in public and communal open space

Overall, the proposed landscaping scheme will result in a significant net gain in the biodiversity value of the Site compared to the baseline habitats.

5 Conclusion

As the Site is of low baseline ecological importance and no ecological impacts are currently envisaged, it is not necessary to carry out an Ecological Impact Assessment. This Preliminary Ecological Appraisal may be included in the Part 8 application to demonstrate that ecological features have been considered. Screening for Appropriate Assessment is provided in a separate document.

As noted above, the proposed development is likely to provide a net gain in biodiversity, and thus complies with Policy GI 16 of the Dublin City Development Plan.

6 References

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