Griffeen Community College

School Development

Ecological Impact Assessment




Prepared By:

Moore Group -
Environmental Services

On behalf of:
Dept. of Skills & Education

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Moore Archaeological and Environmental Services Limited

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1. INTRODUCTION

Moore Group was commissioned by the Department of Skills & Education to undertake a Biodiversity; Flora & Fauna Survey and EcIA of the site of a proposed development of a new School at Griffeen Avenue., Co. Dublin in order for South Dublin County Council to undertake impact assessment with regard to the planning application.

This report was compiled by Ger O'Donohoe of Moore Group providing information on habitats in the study area. Ger O'Donohoe M.Sc. is the principal ecologist with Moore Group and has over 25 years' experience in ecological impact assessment.

This report provides information on ecological features if present within the study areas, of particular significance, primarily designated habitats and species, including habitats/species listed in Annex I, II and IV of the EU Habitats Directive, rare flora listed in the Flora Protection Order along with other semi-natural habitats of conservational value.

The report has been compiled in compliance with the European Communities Legal requirements and follows EPA Draft Guidelines on Information to be contained in an EIAR (EPA, 2017) and on Transport Infrastructure Ireland **TII** policy and guidance outlined in Section 2.

The European Habitats Directive 92/43/EEC (Article 6) indicates the need for plans and projects to be subject to Habitats Directive Assessment (also known as Appropriate Assessment) if the plan or project not directly connected with or necessary to the management of a Natura 2000 site (which includes SACs and SPAs) but which has the potential to have implications on a site's conservation objectives. These implications can be significant effects either individually or in combination with other plans or projects.

As such, a report for the purposes of Appropriate Assessment Screening was undertaken by Moore Group for the proposed development on behalf of South Dublin Council. This stand-alone report is presented separately as part of the planning application package for the Project.

Figure 1. Showing the proposed development site location in west Dublin (©OSM).

2. METHODOLOGY

2.1. POLICY & LEGISLATION

2.1.1. EU Habitats Directive

The "Habitats Directive" (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna) is the main legislative instrument for the protection and conservation of biodiversity within the European Union and lists certain habitats and species that must be protected within wildlife conservation areas, considered to be important at a European as well as at a national level. A "Special Conservation Area" or SAC is a designation under the Habitats Directive. The Habitats Directive sets out the protocol for the protection and management of SACs.

The Directive sets out key elements of the system of protection including the requirement for "Appropriate Assessment" of plans and projects. The requirements for an Appropriate Assessment are set out in the EU Habitats Directive. Articles 6(3) and 6(4) of the Directive.

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includes SACs and SPAs) but which has the potential to have implications on a site's conservation objectives. These implications can be significant effects either individually or in combination with other plans or projects.

2.1.2. EU Birds Directive

The "Birds Directive" (Council Directive 79/409/EEC amended by Council Directive 2009/147/EC on the Conservation of Wild Birds) provides for a network of sites in all member states to protect birds at their breeding, feeding, roosting and wintering areas. This directive identifies species that are rare, in danger of extinction or vulnerable to changes in habitat and which need protection (Annex I species). Appendix I indicates Annex I bird species as listed on the Birds Directive. A "Special Protection Area" or SPA, is a designation under The Birds Directive.

Special Areas of Conservation and Special Protection Areas form a pan-European network of protected sites known as Natura 2000 sites and any plan or project that has the potential to impact upon a Natura 2000 site requires appropriate assessment.

2.1.3. Wildlife Acts 1976 - 2012

The primary domestic legislation providing for the protection of wildlife in general, and the control of some activities adversely impacting upon wildlife is the Wildlife Act of 1976. The aims of the wildlife act according to the National Parks and Wildlife Service are "... to provide for the protection and conservation of wild fauna and flora, to conserve a representative sample of important ecosystems, to provide for the development and protection of game resources and to regulate their exploitation, and to provide the services necessary to accomplish such aims." All bird species are protected under the act. The Wildlife (Amendment) Act of 2000 amended the original Act to improve the effectiveness of the Act to achieve its aims.

2.2. SURVEY METHODOLOGY

2.2.1. Desk Study

The assessment was carried out in three stages, firstly through desktop assessment to determine existing records in relation to habitats and species present in the study areas. This included research on the NPWS metadata website, the National Biodiversity Data Centre (NBDC) database and a literature review of published information on flora and fauna occurring in the development area.

Sources of information that were used to collect data on the Natura 2000 network of sites, and the environment within which they are located, are listed below:

- The following mapping and Geographical Information Systems (GIS) data sources, as required:

  - National Parks & Wildlife (NPWS) protected site boundary data;
  - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
  - OSI/Environmental Protection Agency (EPA) rivers and streams, and catchments;
  - Open Street Maps;
  - Digital Elevation Model over Europe (EU-DEM);
  - Google Earth and Bing aerial photography 1995-2020;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie including:
  - Natura 2000 - Standard Data Form;
  - Conservation Objectives;
  - Site Synopses;
- National Biodiversity Data Centre records;
  - Online database of rare, threatened and protected species;
  - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans in neighbouring areas;
  - South County Development Plan 2016-2022.

2.2.2. Field Study

The second phase of the assessment involved a site visit to establish the existing environment in the footprint of the proposed development area. Areas which were highlighted during desktop assessment were investigated in closer detail according to the Heritage Council Best Practice Guidance for Habitat Survey and Mapping (Smith *et al.*, 2011). Habitats in the proposed development area were classified according to the Heritage Council publication "A Guide to Habitats in Ireland" (Fossitt, 2000). This publication sets out a standard scheme for identifying, describing and classifying wildlife habitats in Ireland. This form of classification uses codes to classify different habitats based on the plant species present. Species recorded in this report are given in both their Latin and English names. Latin names for plant species follow the nomenclature of "An Irish Flora" (Parnell & Curtis, 2012).

Habitats were surveyed on the 25 March and again on the 9 July 2020 by conducting a study area walkover covering the main ecological areas identified in the desktop assessment. The second survey date is within the optimal botanical survey period. A photographic record was made of features of interest during fieldwork.

Signs of large mammals such as badgers were searched for while surveying the study area during fieldwork, noting any sights, signs or any activity in the vicinity especially along adjacent boundaries.

A dusk Bat Survey was undertaken on the evening of the second habitat survey in July 2020. The survey undertaken was in line with recommendations of the Bat Conservation Trust 'Good Practice Guidelines,

3rd edition, 2016' (BCT Guidelines 2016) and the Irish Wildlife Manual No. 25' (Kelleher, C. & Marnell, F. 2006). The survey was designed and carried out by Ger O'Donohoe M.Sc. Ger has over 15 years' experience of carrying out bat surveys.

A mobile detector survey was carried out completing looped transects of the site during the dusk period to survey for commuting, feeding and potential roost sites. The survey commenced at 21:10; c. 40 min prior to sunset c. 21:50.

The bat detector used during the walked surveys was a Pettersson D230 bat detector. A contact describes a bat observed by the surveyor. This contact can range from a commuter passing quickly to a foraging bat circling a feature lasting for several minutes. Some observations contain multiple bats. When several bats of the same species are encountered together, they are recorded under the one contact. A separate contact is recorded for each species. A contact finishes when the recorder assumes the bat is no longer present. It is likely that the same bat is recorded in several contacts throughout the night. This survey type cannot estimate abundance of bats, rather activity; the amount of use bats make of an area / feature. The survey followed the guidelines as set out in bat conservation Ireland's 'Bat Survey Guidelines'.

Sunset on the 9 July 2020 occurred at c. 21:51. A light westerly breeze was recorded during the dusk survey and conditions in this area of west Dublin were showery. Cloud cover ranged from 40-60%. The air temperature varied during the evening of the survey between 18.0 degrees at 20:00 to 14.0 degrees Celsius at 22:00.

Birds were surveyed using standard transect methodology and signs were recorded where encountered during the field walkover survey.

The final part of the assessment involves an evaluation of the study area and determination of the potential impacts on the habitats of the study area. This part of the assessment forms the basis for Impact Assessment and is based on the following guidelines and publications:

- Assessment of plans and projects significantly affecting Natura 2000 sites (EC, 2002);
- Managing Natura 2000 Sites (EC, 2000);
- Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC (EC, 2007);
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DEHLG, December 2009, Rev 2010);
- EPA Draft Guidelines on Information to be contained in an EIAR (EPA, 2017);
- Best Practice Guidance for Habitat Survey and Mapping (Heritage Council, 2011);
- Ecological Surveying Techniques for Protected Flora & Fauna (NRA, 2008)
- Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009)
- Guidelines for Ecological Impact Assessment in the UK and Ireland (CIEEM, 2019).

2.2.3. Site Evaluation and Impact Assessment

The TII Guidelines for Assessment of Ecological Impacts of National Road Schemes (NRA, 2009) outlines the methodology for evaluating ecological impacts of the project in the present report. According to the TII Guidelines, the Ecological Study should address:

- Designated conservation areas and sites proposed for designation within the zone(s) of influence of any of the route options,
- All the main inland surface waters (e.g. rivers, streams, canals, lakes and reservoirs) that are intersected by any of the route corridor options, including their fisheries value and any relevant designations,
- Aquifers and dependent systems and turloughs and their subterranean water systems,
- Any known or potentially important sites for rare or protected flora or fauna that occur along or within the zone(s) of influence of any of the route options,
- Any other sites of ecological value, that are not designated, along or in close proximity to any of the route corridor options,
- Any other relevant conservation designations or programmes (e.g. catchment management schemes, habitat restoration or creation projects, community conservation projects, etc.),
- Any other features of particular ecological or conservation significance along any of the route options.

The TII Guidelines set out a method of evaluating the importance of sites identified and in turn the evaluation of the significance of impacts. The Evaluation Scheme is presented in Appendix 1.

3. PROJECT DESCRIPTION

The development consists of the provision of a 3 storey, 1,000 No. pupil Post Primary School (roll no. 76454S), including a 4 No. classroom Special Educational Needs Unit, with a gross floor area of 11,443sq.m, including a sports hall and all ancillary teacher and pupil facilities. The development will also include the provision of bicycle parking; staff parking; vehicle drop off/setdown areas; internal access roads; hard and soft play areas, piped infrastructure and ducting; plant; landscaping and boundary treatments; PV panels; external courtyards; disabled car parking spaces; ESB substation, ramps and stairs; signage; changes in level and all associated site development and excavation works above and below ground. The proposed development is located within the Clonburris Strategic Development Zone Planning Scheme 2019 area..

Surface water will be controlled by standard SuDS mechanisms including an existing attenuation pond and wastewater will be directed to municipal sewer for appropriate treatment. Figure 2 shows the redline boundary of the proposed development site.

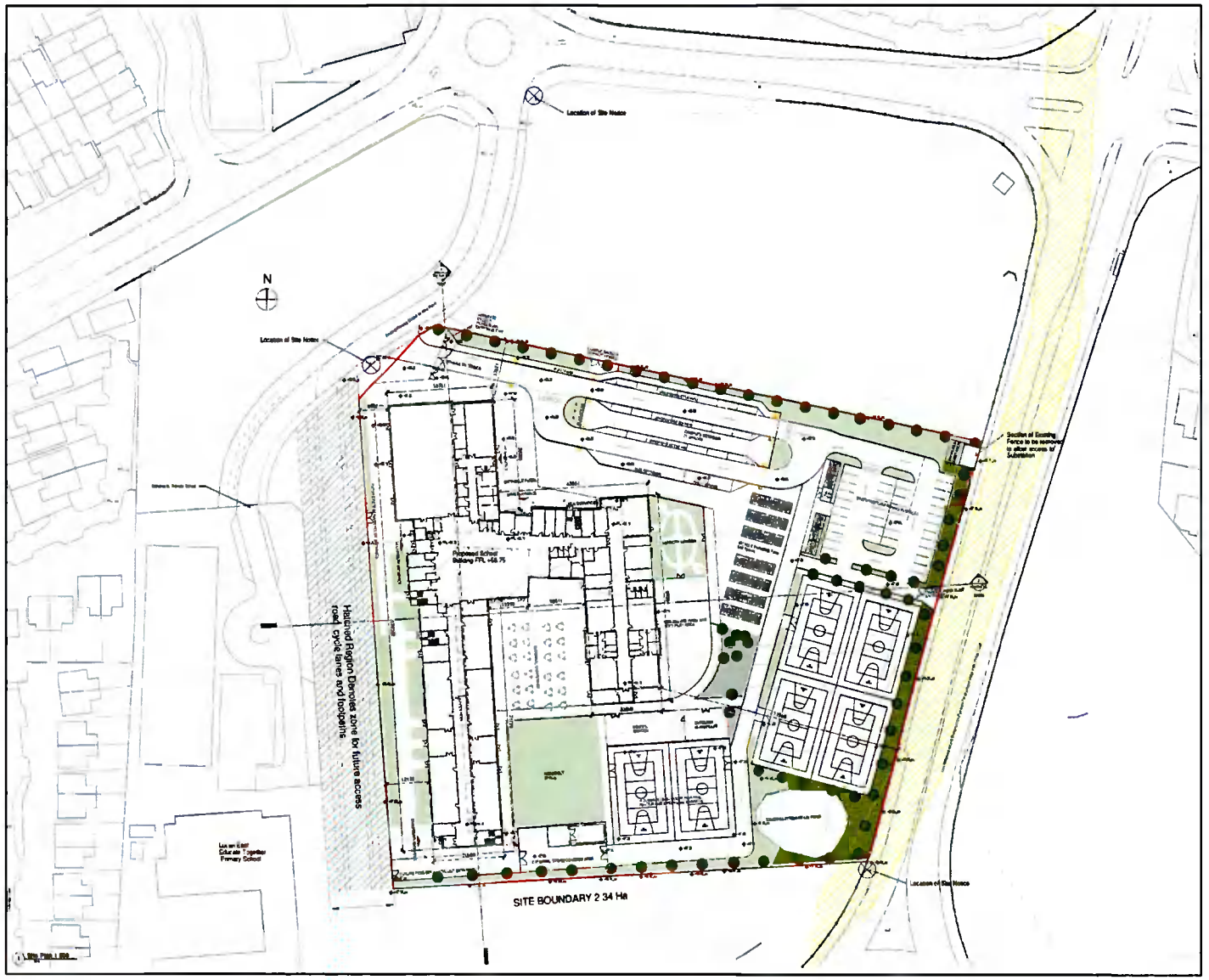

Figure 2. Proposed layout with the boundary of the development shown in red.

4. EXISTING ENVIRONMENT

4.1. DESIGNATED CONSERVATION AREAS

The Department of Housing, Planning and Local Government (previously DoEHLG)'s Guidance on Appropriate Assessment (2009) recommends an assessment of European sites within a Zone of Influence (ZoI) of 15km. This distance is a guidance only and a zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source- Pathway-Receptor framework and not by arbitrary distances (such as 15 km).

The Zone of Influence may be determined by connectivity to the Proposed Development in terms of:

- Nature, scale, timing and duration of works and possible impacts, nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Sensitivity and location of ecological features.

The potential for source pathway receptor connectivity is firstly identified and detailed information is then provided on sites with connectivity. European sites that are located within 15 km of the Project are listed in Table 1 and presented in Figures 3 and 4, below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website (www.npws.ie) on the 28 May 2021.

Table 1 European Sites located within the potential zone of impact[1] of the Project.

Site Code	Site name	Distance (km)[2]
000210	South Dublin Bay SAC	14.36
001209	Glenasmole Valley SAC	9.76
001398	Rye Water Valley/Carton SAC	4.63
002122	Wicklow Mountains SAC	11.74
004024	South Dublin Bay and River Tolka Estuary SPA	13.46
004040	Wicklow Mountains SPA	14.08

The Project is located on a greenfield site at Lucan. The closest European site is the Rye Water Valley/Carton SAC (Site Code 001398) which is located approximately 4.6km to the north. There is no connectivity with this site or with the Glenasmole Valley SAC or Wicklow Mountains SAC to the south and they are excluded from the assessment at this stage.

[1] All European sites potentially connected irrespective of the nature or scale of the proposed Project.

[2] Distances indicated are the closest geographical distance between the proposed Project and the European site boundary, as made available by the NPWS. Connectivity along hydrological pathways may be significantly greater.

There is tentative connectivity to Dublin Bay via municipal sewer. However, all wastewater from the proposed development will be appropriately treated prior to discharge to Dublin Bay and therefore potential effects on European sites in Dublin can be excluded.

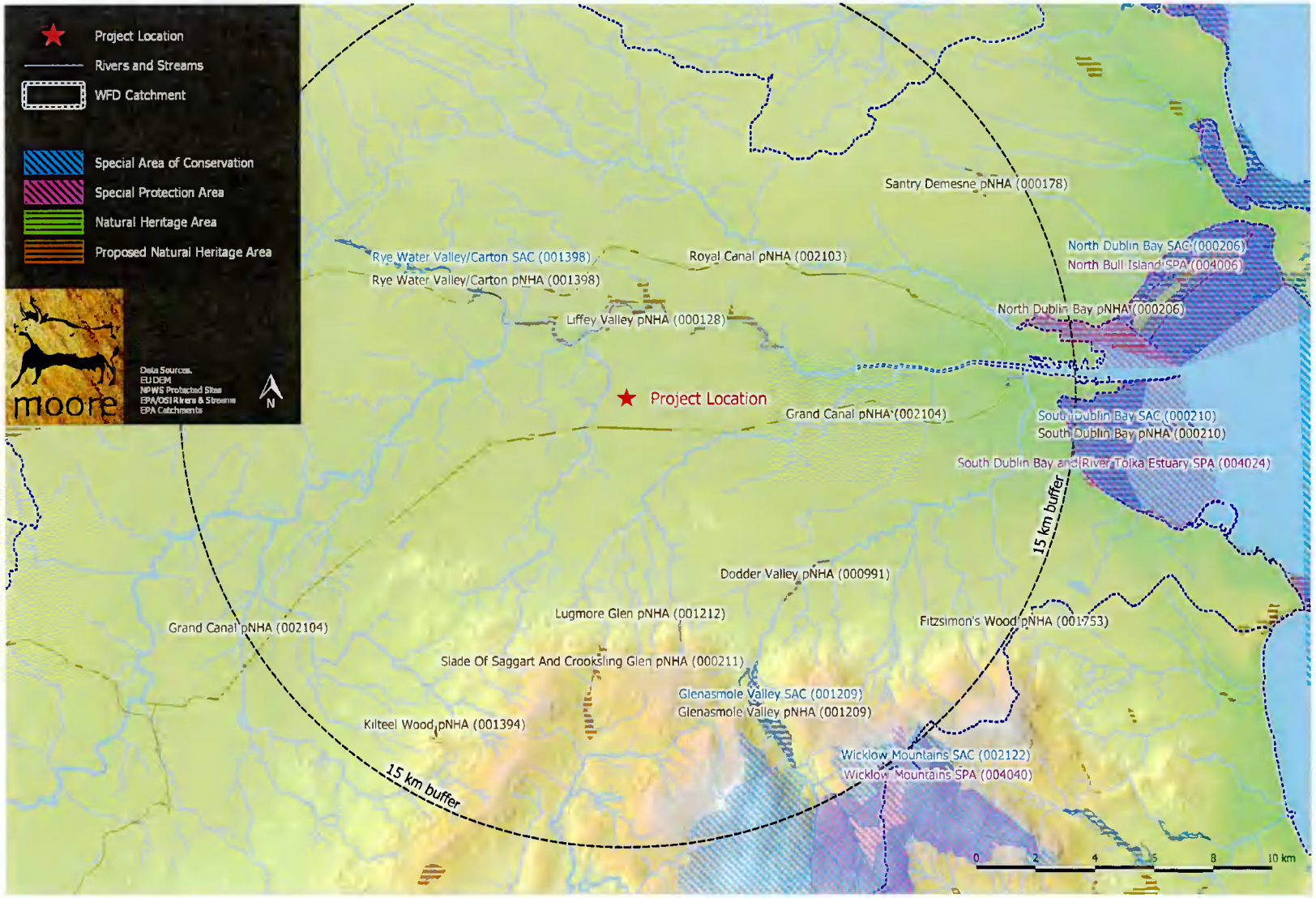

Figure 3. Showing the designated conservation sites in the vicinity of the Project.

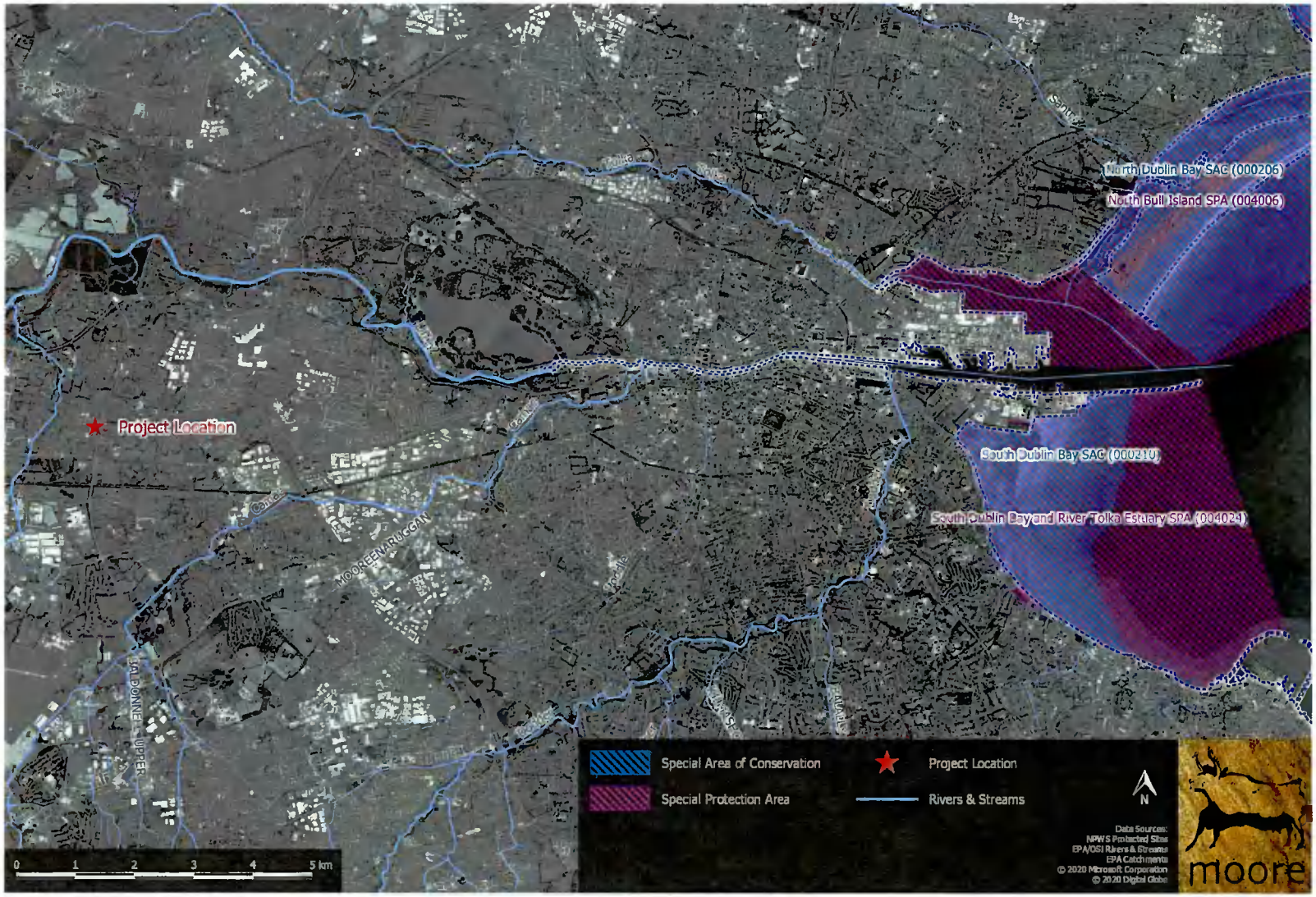

Figure 4. Detail of designated conservation sites in the vicinity of the Project location.

4.2. HABITAT DESCRIPTIONS

The proposed development boundary and habitats contained within are presented in the Habitat Map in Figure 5 below. A list of habitats recorded and their corresponding Fossitt codes is presented in Table 2 below.

The site essentially comprises the remnant sections of truncated fields which have been reduced in size by surrounding development such as the housing estates and access roads such as the Outer Ring Rd. at Kishoge and Griffeen Avenue.

There two remnant hedgerows (WL1) which intersect toward the centre of the site.

The remaining grassland areas have been modified, particularly along the Outer Ring Rd. and Griffeen Avenue where encroaching development of those roads resulted in previous clearance and recolonisation succeeding to grassland.

Table 2 Habitat types present according to Fossitt (2000).

Habitat	Habitat Category	Habitat Type
(F) Freshwater	(FL) Lakes and ponds	(FL8) Artificial pond
	(FW) Water courses	(FW4) Drainage ditches
(G) Grassland	(GA) Improved grassland	(GA1) Improved grassland
(W) Woodland and scrub	(W) Scrub/Transitional woodland	(WS1) Scrub
	(WL) Linear woodland/scrub	(WL1) Hedgerow

4.2.1. Habitats & Flora

(FL8) Artificial pond

There is an existing attenuation pond on the south-eastern corner of the site. It is lined with an impermeable layer and is artificial. The surrounding flatter land is comprised of a herb-rich grassland with abundant Yarrow (*Achillea millefolium*), Creeping cinquefoil (*Potentilla reptans*), Silverweed (*Potentilla anserina*), Black medick (*Medicago lupulina*) and Broad dock (*Rumex obtusifolius*).

The pond itself is colonised by abundant Bulrush (*Typha latifolia*), Soft rush (*Juncus effuses*) and Reed Canary-grass (*Phalaris arundinaceae*) with Toad Rush (*Juncus bufonius*) and Lesser Spearwort (*Ranunculus flammula*) at the water level.

(FW4) Drainage ditches

This habitat classification applies to drainage ditches within the site associated with outgrown hedgerows. Draining ditches are generally shallow and stagnant being self-contained draining to ground. There is one more recently developed drainage ditch which is associated with the Outer Ring Road which is culverted at the north-eastern end of the site. The ditch was dry at the culverted end even after recent rain in March.

Species present in ditches include Great willowherb (*Epilobium hirsutum*), Meadowsweet (*Filipendula ulmaria*), Buttercup (*Ranunculus acris*) and Nettle (*Urtica dioica*). Stagnant sections contained Duckweed (*Lemna minor*).

(GA1) Improved grassland

This habitat refers to those grassland areas which comprise the open fields on the site. Species present include Cocks foot (*Dactylis glomerata*), Bent (*Agrostis* spp.), and Meadow grass (*Poa* spp.). Ribwort plantain (*Plantago lanceolata*), Meadow Buttercup (*Ranunculus acris*), Daisy (*Bellis perennis*), and Nettle (*Urtica dioica*) are common along with Dandelion (*Taraxacum* spp.), Broad dock (*Rumex obtusifolius*) and Hogweed (*Heracleum sphondylium*). Parts of the site are slightly wetter and have a high component of Hard rush (*Juncus inflexus*). Teasel (*Dipsacus fullonum*) was frequent on the south-western section of the site.

(WL1) Hedgerows

This habitat refers the two internal intersecting field boundaries. The predominant species present is Ash (Fraxinus excelsior) with Hawthorn (*Crataegus monogyna*) and Alder (*Alnus glutinosa*) along with Blackthorn (*Prunus spinosa*), Elder (*Sambucus nigra*) and Willow (*Salix* spp).

The hedgerows are generally poorly maintained and have large gaps and are undermined by clearance and antisocial behaviour. Sections that have understorey flora includes Nettle stands and Bramble scrub with abundant Clavers (*Galium aparine*) and Lords and ladies (*Arum maculatum*).

(WS1) Scrub

This habitat was recorded in two areas where succession of habitats has occurred from spreading Bramble to the east of the north-central hedgerow. This scrub area also has stands of Rosebay willowherb (*Chamerion angustifolium*). Blackthorn scrub is extending from the south-eastern hedgerow into the field area. There are also patches of Gorse (*Ulex europaeus*) and scattered Rosa spp.

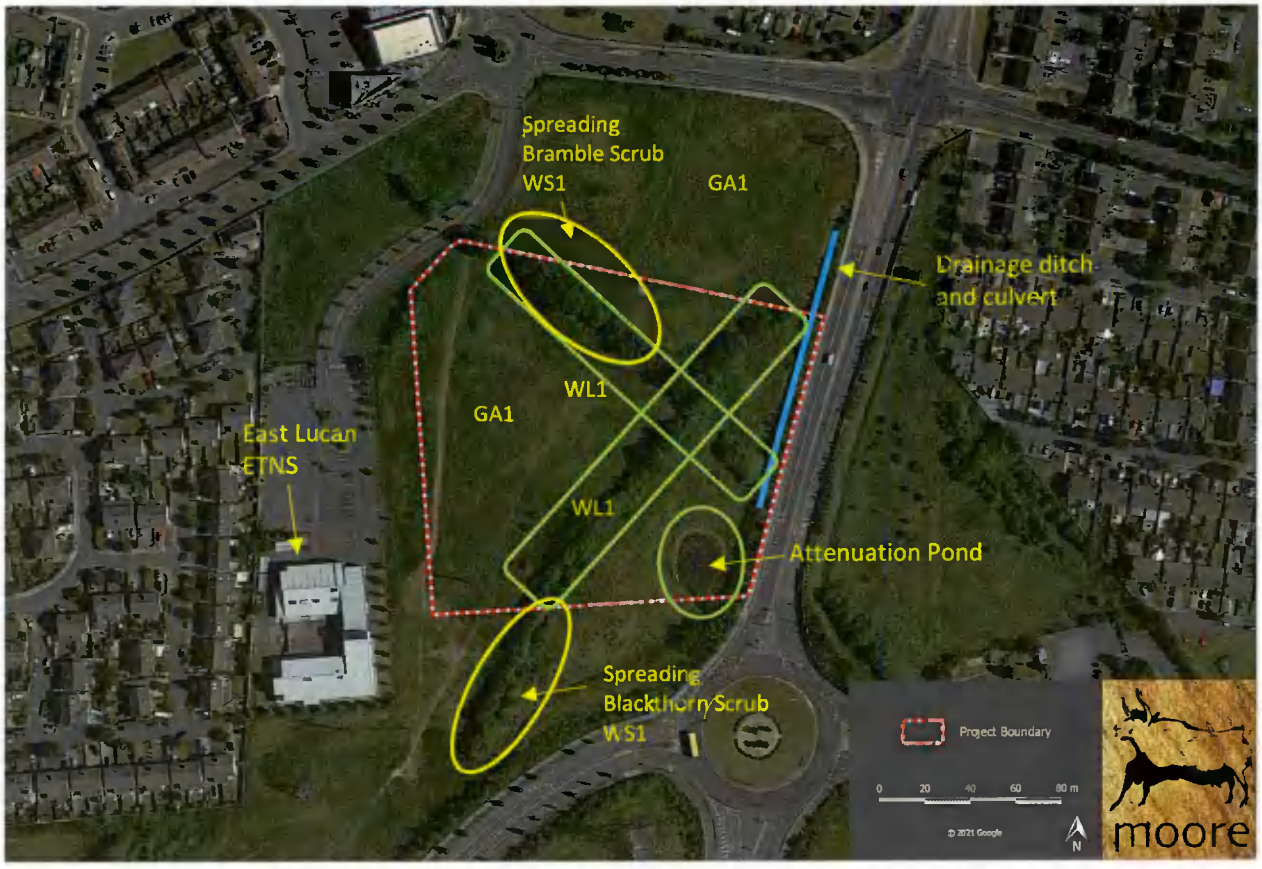

Figure 5. Habitat map based on recent aerial photography.

4.2.2. Invasive Species

The site was surveyed for invasive alien species during the habitat walkover. However, none were recorded on site.

4.1. FAUNA

4.1.1. Mammals

Badgers

There are no records for badgers in the surrounding green areas and no signs of badger were recorded on site.

Bats

There are no records of bats or bat roosts in the study area. The internal hedgerows are of low value to bats for feeding and commuting.

The dusk Bat Detector Survey on 9 July 2020 did not record any bats. The trees on site are of relatively low potential to roosting bats with few services or spaces for summer roosting.

Other mammals

There were signs of fox recorded along with rabbits. These species are of low ecological concern and are not protected.

4.1.2. Birds

A list of bird species recorded during fieldwork in 2020 is presented in Table 3 below. There were no rare or Annex 1 bird species recorded on the site.

Table 3 Birds recorded during fieldwork in 2020.

Birds	Scientific name	BWI Status	Habitat Type
Blackbird	*Turdus merula*	Green	Dense woodland to open moorland, common in gardens
Chaffinch	*Fringilla coelebs*	Green	Hedgerows, gardens and farmland
Robin	*Erythacus rubecula*	Green	Woodland, gardens and parks
Woodpigeon	*Columba palumbus*	Green	Gardens, woods, hedges
Wren	*Troglodytes troglodytes*	Green	Low cover anywhere, especially woodlands
Blackbird	*Turdus merula*	Green	Dense woodland to open moorland, common in gardens

4.1.3. Amphibians

A large patch of frogspawn was recorded at the northern end of the attenuation pond in March 2020. Frogs and frogspawn are protected under the Wildlife Acts.

5. ASSESSMENT OF IMPACTS

5.1. SITE EVALUATION

The ecological value of the site was assessed following the guidelines set out in the Institute of Ecology and Environmental Management's Guidelines for Ecological Impact Assessment (2019) and according to the Natura Scheme for evaluating ecological sites (after Nairn & Fossitt, 2004). Judgements on the evaluation were made using geographic frames of reference, e.g. European, National, Regional or Local.

Due cognisance of features of the landscape which are of major importance for wild flora and fauna, such as those with a "stepping stone" and ecological corridors function, as referenced in Article 10 of the Habitats Directive were considered in this assessment.

The closest European site is the Rye Water Valley/Carton SAC (Site Code 001398) which is located approximately 4.6km to the north. There is no connectivity with this site or with the Glenasmole Valley SAC or Wicklow Mountains SAC to the south and they were excluded during appropriate assessment screening.

There is tentative connectivity to Dublin Bay via municipal sewer. However, all wastewater from the proposed development will be appropriately treated prior to discharge to Dublin Bay and therefore potential effects on European sites in Dublin Bay can be excluded.

Given the above analysis, it is considered that there will be no potential for significant effects on any of the European sites considered and therefore potential effects on European sites can be excluded at a preliminary screening stage.

There are no rare or protected habitats recorded in the study area. The development area is generally of Low Local Ecological Value. The attenuation pond is of High Local Ecological Value.

Following a detailed literature review, desktop assessment and field survey the site can be categorised into a three main habitat types:

- Artificial pond (FL8)
- Hedgerows/Scrub (WL1/WS1)
- Grassland (GA1)

There are no Annexed habitats on or adjacent to the proposed development site. There are no rare or protected habitats recorded within the study area.

The habitat of highest conservation value is the attenuation pond which contained frogspawn late March.

The general habitats under the footprint of the proposed development are of low local ecological value.

There were no invasive species recorded on the site.

5.2. IMPACT ASSESSMENT

5.2.1. Direct Impacts

Habitats

There will be a minor loss of low value hedgerow and scrub and modified grassland habitats. The potential effects on local ecology are ***neutral*** and ***imperceptible*** for the construction and operational phases.

The attenuation pond will be conserved *in situ* and there will be no impacts in this habitat as a refuge for amphibians.

Fauna

There are no predicted impacts on Badgers as a result of the proposed development.

Potential impacts on bats and birds will be avoided by cutting of vegetation outside the bird nesting season March 1 to August 31.

Any trees to be removed will be Mature trees, which shall be felled in the period early September to late October, or early November, in order to avoid the disturbance of any roosting bats as per Transport Infrastructure Ireland (TII and formerly the National Roads Authority) guidelines (NRA 2006a and 2006b).

Foxes and rabbits are not legally protected and will move to adjacent suitable habitats.

5.2.2. Indirect Impacts

There are no predicted indirect impacts on biodiversity.

5.2.3. Cumulative Impacts

Cumulative impacts or effects are changes in the environment that result from numerous human-induced, small-scale alterations. Cumulative impacts can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects as a result of the coming together of two or more effects.

As part of the Screening for an Appropriate Assessment, in addition to the proposed Project, other relevant plans and projects in the area must also be considered at this stage. This step aims to identify at this early stage any possible significant in-combination effects of the proposed development with other such plans and projects.

A review of the National Planning Application Database was undertaken. The first stage of this review confirmed that there were no data outages in the area where the proposed Project is located. The

database was then queried for developments granted planning permission within 500m of the proposed Project within the last three years (date of query 20th of March 2020).

There are 30 applications relating to small scale extensions and building alterations. There are no predicted in-combination effects given the enclosed nature and location of the proposed works.

6. MITIGATION MEASURES

6.1.1. Fauna

Potential impacts on birds will be avoided by cutting of vegetation outside the bird nesting season March 1st to August 31st.

7. RESIDUAL IMPACTS

The proposed development is located in an area of low ecological value and as such predicted to have a ***neutral imperceptible*** effect on biodiversity.

Specific local mitigation measures include the avoidance of cutting of vegetation during the bird nesting season with regard to the construction phase.

With the employment of appropriate mitigation measures with regard to local biodiversity, the Proposed Development will have a neutral imperceptible and long-term effect on biodiversity.

8. CONCLUSIONS

The development is located in an area of low to moderate ecological value and as such predicted to have a ***neutral imperceptible*** effect on biodiversity.

9. REFERENCES

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Appendix 1

TII Evaluation of Habitats

Ecological valuation: Examples

International Importance:

- 'European Site' including Special Area of Conservation (SAC), Site of Community Importance (SCI), Special Protection Area (SPA) or proposed Special Area of Conservation.
- Proposed Special Protection Area (pSPA).
- Site that fulfills the criteria for designation as a 'European Site' (see Annex III of the Habitats Directive, as amended).
- Features essential to maintaining the coherence of the Natura 2000 Network.[4]
- Site containing 'best examples' of the habitat types listed in Annex I of the Habitats Directive.
- Resident or regularly occurring populations (assessed to be important at the national level)[5] of the following:
  - Species of bird, listed in Annex I and/or referred to in Article 4(2) of the Birds Directive; and/or
  - Species of animal and plants listed in Annex II and/or IV of the Habitats Directive.
- Ramsar Site (Convention on Wetlands of International Importance Especially Waterfowl Habitat 1971).
- World Heritage Site (Convention for the Protection of World Cultural & Natural Heritage, 1972).
- Biosphere Reserve (UNESCO Man & The Biosphere Programme).
- Site hosting significant species populations under the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals, 1979).
- Site hosting significant populations under the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats, 1979).
- Biogenetic Reserve under the Council of Europe.
- European Diploma Site under the Council of Europe.
- Salmonid water designated pursuant to the European Communities (Quality of Salmonid Waters) Regulations, 1988, (S.I. No. 293 of 1988).[6]

National Importance:

- Site designated or proposed as a Natural Heritage Area (NHA).
- Statutory Nature Reserve.
- Refuge for Fauna and Flora protected under the Wildlife Acts.
- National Park.
- Undesignated site fulfilling the criteria for designation as a Natural Heritage Area (NHA); Statutory Nature Reserve; Refuge for Fauna and Flora protected under the Wildlife Act; and/or a National Park.
- Resident or regularly occurring populations (assessed to be important at the national level)[7] of the following:
  - Species protected under the Wildlife Acts; and/or
  - Species listed on the relevant Red Data list.
- Site containing 'viable areas'[8] of the habitat types listed in Annex I of the Habitats Directive.

County Importance:

- ☐ Area of Special Amenity.[9]
- ☐ Area subject to a Tree Preservation Order.
- ☐ Area of High Amenity, or equivalent, designated under the County Development Plan.
- ☐ Resident or regularly occurring populations (assessed to be important at the County level)[10] 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
  - ☐ Species listed on the relevant Red Data list.
- ☐ Site containing area or areas of the habitat types listed in Annex I of the Habitats Directive that do not fulfil the criteria for valuation as of International or National importance.
- ☐ County important populations of species, or viable areas of semi-natural habitats or natural heritage features identified in the National or Local BAP,[11] if this has been prepared.
- ☐ Sites containing semi-natural habitat types with high biodiversity in a county context and a high degree of naturalness, or populations of species that are uncommon within the county.
- ☐ Sites containing habitats and species that are rare or are undergoing a decline in quality or extent at a national level.

Local Importance (higher value):

- ☐ Locally important populations of priority species or habitats or natural heritage features identified in the Local BAP, if this has been prepared;
- ☐ Resident or regularly occurring populations (assessed to be important at the Local level)[12] 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
  - ☐ 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.

Appendix 2

Site Photos

Photo1. View of the grassland area adjacent to Griffeen Avenue looking west.

Photo2. View of the existing attenuation pond adjacent to the Outer Ring Rd.

Photo 3. Scattered Teasel adjacent to the Outer Ring Rd.

Photo 4. Culverted end of the more recently developed drainage ditch along the Outer Ring Rd. boundary (note: dry at this end in March after recent rain).