

Appropriate Assessment Screening for a proposed large-scale residential development (LRD) at Fortfield Road, Terenure, Dublin 6W.



10th December 2024

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.

On behalf of: 1 Celbridge West Land Limited

		Document Control Sheet		
Project	Appropriate Assessment Screening for a proposed large-scale residential development at Fortfield Road, Terenure, Dublin 6W			
Report	Appropriate Assessr	Appropriate Assessment Screening		
Date	10 th December 2024	10 th December 2024		
Version	Author	Reviewed	Date	
Draft 01	Bryan Deegan Gayle O'Farrell 7 th October 2024			
Planning	Bryan Deegan 10 th December 2024			

Contents

Introduction	
Altemar Ltd	
Statement of Authority	
Background to the Appropriate Assessment	
Stages of the Appropriate Assessment	3
Stage 1 Screening Assessment	
Project Description	4
Landscape	4
Drainage	15
Identification of Relevant Natura 2000 Sites	20
In-Combination Effects	43
Conclusions	
References	47
Appendix I Winter Bird Surveys 2023-2024	
Appendix II Winter Bird Surveys 2022-2023	56
Appendix III- Winter Bird Surveys February-March 2022	63

Introduction

An Appropriate Assessment is an assessment of the potential effects of a proposed project or plan, on its own, or in combination with other plans or projects, on one or more European sites (Special Areas of Conservation (SAC) or Special Protection Areas (SPA)).

The following Appropriate Assessment Screening has been prepared by Altemar Ltd. at the request of 1 Celbridge West Land Limited for the proposed Large-Scale Residential Development (LRD) at Fortfield Road, Terenure, Dublin 6W. The AA Screening stage examines the likely significant effects of the proposed development, either on its own, or in combination with other plans and projects, upon a European site and considers whether, on the basis of objective scientific evidence, it can be concluded, in view of best scientific knowledge and the conservation objectives of the relevant European sites, that there are not likely to be significant effects on any European site.

Altemar Ltd.

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include residential, infrastructural, renewable, oil & gas, private industry, local authorities, EC projects and State/semi-State Departments.

Statement of Authority

Bryan Deegan (MCIEEM) prepared this AA Screening. Bryan is the managing director of Altemar. Bryan is an environmental scientist, aquatic and marine biologist with 30 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture).

Background to the Appropriate Assessment

The Habitats Directive 92/43/EEC (together with the Birds Directive (2009/147/EC)) forms the cornerstone of Europe's nature conservation policy. The Directive protects over 1000 animals and plant species and over 200 "habitat types" which are of European importance. In the Habitats Directive, Articles 3 to 9 provide the legislative means to protect habitats and species of European Community interest through the establishment and conservation of an EU-wide network of conservation sites (NATURA, 2000). These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive), Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the [NATURA 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site's conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the component national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

As outlined in "Managing Natura 2000 sites, The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC" (European Commission, 21 November 2018) "The purpose of the appropriate assessment is to assess the implications of the plan or project in respect of the site's conservation objectives, either individually or in combination with other plans or projects. The conclusions should enable the competent authorities to ascertain whether the plan or project will adversely affect the integrity of the site concerned. The focus of the appropriate assessment is therefore specifically on the species and/or the habitats for which the European site is designated."

As outlined in the EC guidance document on Article 6(4) (January 2019)1:

"The purpose of the appropriate assessment is to assess the implications of the plan or project in respect of the site's conservation objectives, either individually or in combination with other plans or projects. The conclusions should enable the competent authorities to ascertain whether the plan or project will adversely affect the integrity of the site concerned. The focus of the appropriate assessment is therefore specifically on the species and/or the habitats for which the Natura 2000 site is designated.

In its Waddenzee ruling (C-127/02 paragraphs 52–54, 59) the Court emphasized the importance of using the best scientific knowledge when carrying out the appropriate assessment in order to enable the competent authorities to conclude with certainty that there will be no adverse effects on the site's integrity:

'As regards the concept of 'appropriate assessment' within the meaning of Article 6(3) of the Habitats Directive, it must be pointed out that the provision does not define any particular method for carrying out such an assessment. None the less, according to the wording of that provision, an appropriate assessment of the implications for the site concerned of the plan or project must precede its approval and take into account the cumulative effects which result from the combination of that plan or project with other plans or projects in view of the site's conservation objectives.'

'Such an assessment therefore implies that all the aspects of the plan or project which can, either individually or in combination with other plans or projects, affect those (conservation) objectives must be identified in the light of the best scientific knowledge in the field.'

'The competent national authorities, taking account of the appropriate assessment of the implications of the plan or project for the site concerned in the light of the site's conservation objectives, are to authorise such an activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects.'

Assessments that confine themselves to general descriptions and a superficial review of existing data on 'nature' within the area cannot therefore be considered as 'appropriate' for the purposes of Article 6(3). According to the Court the appropriate assessment should contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the site concerned (C-304/05 paragraph 69)53. It cannot be held that an assessment is appropriate where information and reliable updated data concerning the habitats and species in the site are lacking (C-43/10 paragraph 115).

It is at the time of adoption of the decision authorising implementation of the project that there must be no reasonable scientific doubt remaining as to the absence of adverse effects on the integrity of the site in question (C-239/04, paragraph 24). Furthermore, as regards multi-phase monitoring, such monitoring cannot be considered as sufficient to ensure performance of the obligation laid down in Article 6(3) of the Habitats Directive (C-142/16, paragraph 43).

It follows from the above that the appropriate assessment should be reasoned and recorded. If the record of the assessment does not disclose the reasoned basis for the subsequent decision (i.e. if the record is a simple unreasoned positive or negative view of a plan or project), the assessment does not fulfil its purpose and cannot be considered 'appropriate'.

Finally, timing is also important. The assessment is a step preceding and providing a basis for the other steps—in particular, an approval or refusal of a plan or project. The assessment must therefore be undertaken before the competent authority decides whether or not to undertake or authorise the plan or project (C-127/02 paragraph 42). Of course, where a plan or project undergoes re-design before a decision is taken on it, it is quite in order to revise the assessment as part of an iterative process. However, it should not be open to authorities to add retrospectively to an assessment once the subsequent step in the sequence of steps set out in Article 6(3) and 6(4) has been taken."

¹ https://op.europa.eu/o/opportal-service/download-handler?identifier=11e4ee91-2a8a-11e9-8d04-01aa75ed71a1&format=pdf&language=en&productionSystem=cellar&part=

Stages of the Appropriate Assessment ("AA")

This Appropriate Assessment screening report was undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001), Part XAB of the Planning and Development Act 2000, as amended, in addition to the December 2009 publication from the Department of Environment, Heritage and Local Government; 'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities' and the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). This AA screening report was prepared by to provide the competent authority (the planning authority of Dublin City Council) with information necessary to meet their obligation of carrying out AA screening, to determine whether AA is required. In order to comply with the above Guidelines and legislation, the Appropriate Assessment process must be structured as follows:

1) Screening stage:

- Description of plan or project
- Identification of relevant European sites, and compilation of information on their qualifying interests and conservation objectives
- Identification and description of individual in combination effects likely to result from the proposed project;
- Assessment of the likely significance of the effects identified above. Exclusion of sites where it can be objectively concluded that there will be no likely significant effects; and,
 - Conclusions and screening determination
- 2) Appropriate Assessment (Natura Impact Statement):
 - Description of the European sites that will be considered further;
 - Identification and description of potential adverse impacts on the integrity of the conservation objectives of these sites likely to occur from the project or plan; and,
 - Mitigation Measures that will be implemented to avoid, reduce or remedy any such potential adverse impacts
 - Assessment as to whether, following the implementation of the proposed mitigation measures, it can be concluded, beyond all reasonable scientific doubt, that there will be no adverse impact on the integrity of the relevant European Site in light of its conservation objectives"
 - Conclusions and AA determination

If it can be demonstrated during the AA screening phase (Stage 1), that the possibility of likely significant effect, of the project, can be excluded, whether alone or in combination with other plans or projects, on the conservation objectives of a Natura 2000 site, then no further AA (Stage 2) will be required. It is important to note that there is a requirement to apply a precautionary approach to AA screening. Therefore, where effects are possible, certain or unknown at the screening stage, AA will be required.

In addition, it should be noted that Article 6(3) of the Habitats Directive has been interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an AA of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site. That position is now subject to the decision of the CJEU in *Eco Advocacy* C-721/21where it was held that the AA Screening should take account of "all the constituent elements of that project[development] inherent in it which have the effect of reducing the harmful effects of the project on the [EU] site concerned" where such elements are incorporated into the design of a project, not with the aim of reducing the negative effects of that project on the site concerned, but as "standard features required for all projects of the same type".

Stage 1 Screening Assessment

Project Description

The development will comprise a Large-Scale Residential Development (LRD) on a site at Fortfield Road, Terenure of 284 no. units delivering 19 no. houses and 265 no. apartments made up of studios; 1 beds; 2 beds; 3 beds; and 4 beds. The development will also provide community, cultural and arts space and a creche. Communal internal space for residents will also be delivered. Provision of car, cycle and motorbike parking will be provided throughout the development, including at basement and surface level. Vehicular/pedestrian/cyclist access from Fortfield Road. Proposed upgrade works to the surrounding road network is also included. All associated site development works, open space, services provision, ESB substations, plant areas, waste management areas, landscaping (both public and communal) and boundary treatments.

The proposed site outline, location, site plan and elevations are demonstrated in Figures 1-4.

Landscape

The landscape strategy for the proposed development has been prepared by NMP to accompany this planning application. The proposed landscape plans are demonstrated in Figure 5-10.



Figure 1. Site location



Figure 2. Site outline



Figure 3. site plan



Figure 4. proposed contiguous elevations

LEGEND

ORDERO NUMBER

SHEET RETORCHE



Figure 5. Landscape General Arrangements Plan (Sheet 1 of 6)



Figure 6. Landscape General Arrangements Plan (Sheet 2 of 6)

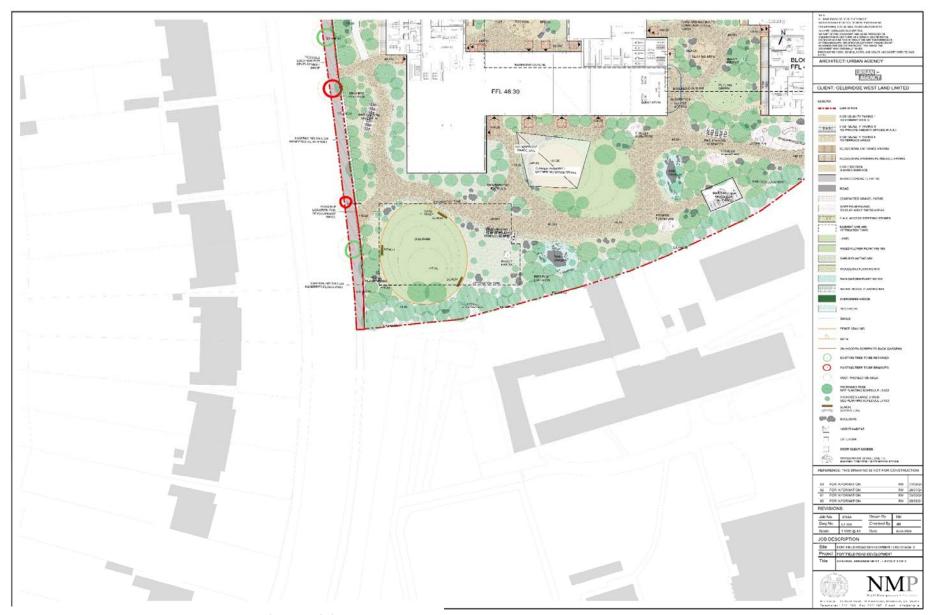


Figure 7. Landscape General Arrangements Plan (Sheet 3 of 6)

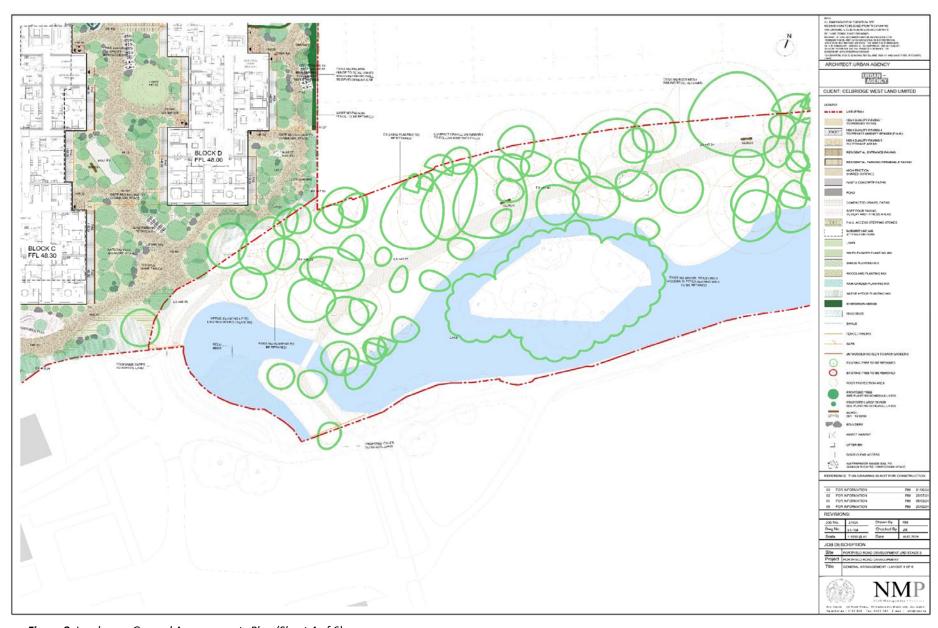


Figure 8. Landscape General Arrangements Plan (Sheet 4 of 6)



Figure 9. Landscape General Arrangements Plan (Sheet 5 of 6)



Figure 10. Landscape General Arrangements Plan (Sheet 6 of 6)

Drainage

A Civil and Structural Engineering Services Report has been prepared by Punch Consulting Engineers to accompany this planning application. This report outlines the following drainage strategy for the proposed development:

Existing Surface Water Drainage System

'Based on available records, the following stormwater drainage exists adjacent to the development site:

- 1. 300mm concrete stormwater sewer flowing south to north along Fortfield Road. This increases to 450mm on approach to the Greenlea Road junction.
- 2. There is an existing lake located at the site's south-eastern boundary adjacent to Terenure College Rugby Club. According to the drainage records the pond is fed from an existing offtake on the River Poddle, known as Lakelands Overflow, which is located at Wainsfort Manor to the west of the subject site. The overflow is piped underground via a 1230mm x 1230mm concrete box culvert for a distance of 1.4km before discharging into the pond. The pond discharges to the River Dodder located to the southeast of the subject site via a 1450mm x 1480mm concrete box culvert.'

Proposed Surface Water Drainage System

"The proposed surface water drainage system has been designed using Causeway Flow software in accordance with the Department of Environment and Local Government's guidance document "Recommendations for Site Development Works for Housing Areas", with guidance taken from the "Greater Dublin Strategic Drainage Study" (GDSDS) and the Dublin City Development Plan.

The model will analyse a range of storms at the 1% AEP (1 in 100-year return period storm), with a 20% additional rainfall to allow for climate change.

The network will be modelled with the proposed attenuation tank volumes and associated hydrobrake flow control outlets included.

Depths of water in the network model (including pipework, manholes, the attenuation tanks and hydrobrakes) have been assessed for surcharging and flood risk. The model is established such that a flood risk is identified in the simulation results if the water rises to within 300mm of the cover level. If the water level rises to a level below this, it is identified as a surcharge within the model results. It is important to note that this warning is given related to proposed ground level at the node and not related to Finished Floor level. All proposed drainage is within roadways, and the adjacent Floor levels will be higher than the road level at that location. The maximum water level in the attenuation tanks is more than 500mm below the Finished Floor level of the adjacent property. This aligns with Criterion 3 of the GDSDS.

Causeway includes a design setting called "additional storage". This is included in the software to account for storage volume in the network provided by secondary drainage including access junctions, inspection chambers, service connections etc. This provides additional storage in the network above the storage provided within the attenuation tank and primary drainage network. 20m3/ha is the standard allowance provided for in Causeway Flow and was utilised for this design."

In relation to Sustainable Urban Drainage Systems (SuDS) the report states that:

"The proposed development has been assessed in relation to Sustainable Urban Drainage Systems (SuDS). A variety of SuDS measures have been proposed to comply with Council recommendations. All SuDS measures are to be implemented with reference to the UK SuDS Manual and Dublin City Council drainage requirements.

Relatively small volumes of rainwater collected on the respective SuDS systems will enter the public sewer network during typical low intensity storms. This is because the proposed SuDS measures will retain rainwater until it is either used via evapotranspiration in the green areas or infiltrated to the ground.

The SuDS processes decrease the impact of the development on the receiving environment by providing amenity and biodiversity in many cases. Regular maintenance of the SuDS proposals is required to ensure they are operating to their optimal level throughout their design life."

Proposed Foul Water Network

As outlined in the Civil and Structural Engineering Services Report has been prepared by Punch Consulting Engineers "Available records show the following foul water drainage infrastructure exists adjacent to the development site:

- 1. 225mm vitrified clay foul sewer flowing south to north along Fortfield Road. This sewer increases in size to a 300mm foul sewer and splits into two lines at the junction of Fortfield Road and Greenlea Road.
- 2. 375mm concrete combined sewer flows west-east along Greenlea Road.

The proposed foul water sewers have been designed using Causeway Flow software in accordance with Irish Water's Code of Practice for Wastewater Infrastructure and the DOE's Recommendations for Site Development Works for Housing Areas. The foul loading has been calculated in accordance with the Code of Practice for Wastewater Infrastructure (particularly Section 3.6, Appendix C and Appendix D) published by Irish Water.

It is proposed that the foul sewer will discharge by gravity to the sewer on Fortfield Road. All foul water drainage shall be designed in accordance with Irish Water's Wastewater Code of Practice and Standard Details.

To ensure the proposed foul drainage can connect to the existing foul sewer on Fortfield Road, and to ensure pipe gradients are provided in accordance with Irish Water's Wastewater Code of Practice, the proposed site levels have been raised to achieve adequate cover, with a concrete surround proposed to pipes where adequate cover as per Irish Water's Wastewater Code of Practice cannot be achieved.

The construction phase of the proposed development is estimated to have a duration of 36 months. Therefore, the timeline for connection to the public foul drainage system will be approx. 34-36 months after commencement of construction on site.

Irish Water have confirmed via the Pre-Connection Enquiry process that the development can be supported by the public foul water network."

Flood Risk Assessment

A Site-Specific Flood Risk Assessment has been prepared by PUNCH Consulting Engineers. In conclusion, the report states that:

'PUNCH Consulting Engineers were appointed to carry out a Site-Specific Flood Risk Assessment (SSFRA) for a proposed development at Fortfield Road, Terenure, Dublin 6W. This SSFRA report evaluates the potential flood risks to the site, ensuring that the development proposals are safe, sustainable, and resilient to flooding. The following document forms part of the planning application to be submitted to Dublin City Council and should be reviewed alongside the planning drawings prepared by Urban Agency Architects.

A flood risk identification exercise was undertaken for the development site as part of this SSFRA which revealed that the pond within the site has not been included in the Catchment Flood Risk Assessment and Management Study (CFRAMS) for the area. Additionally, a review of the Dublin City Development Plan (DP) 2022-2028 Strategic Flood Risk Assessment (SFRA) mapping showed the site to be partially located within Flood Zones A and B.

To adequately assess the flood risk from the pond within the site, a 1D hydraulic model of the water-feature was developed and analysed. The results of the hydraulic modelling indicate that flood waters from the 1%AEP and 0.1%AEP events are retained within the contoured lands around the pond and do not pose a flood risk to the proposed development.

To further investigate the flooding shown on the Dublin City DP SFRA mapping, PUNCH consulted Dublin City Council (DCC) and Nicholas O'Dwyer, their appointed engineers for the Poddle Flood Alleviation Scheme, and confirmed that the flooding is pluvial in nature. Section 2.24 of the OPW's "The Planning System and Flood Risk Management Guidelines" states that "..flood zones are determined on the basis of the probability of river and coastal flooding only..". This point is echoed in Section 1.4.1 of the Dublin DP 2022-2028 SFRA report. As pluvial flooding should not be used in the designation of flood zones, and in the absence of any identifiable fluvial or coastal flood risk to the site, it is concluded that the proposed development site is wholly located in Flood Zone C.

To alleviate concerns relating to pluvial flooding at the site, the associated pluvial flow paths and flood volumes were examined. A proposal has been developed, in direct consultation with DCC, to address the pluvial flooding on Fortfield Road, which includes the provision of a detention basin within the proposed development site boundary. These flood alleviation measures will also remove pluvial flooding from a section of Fortfield Road for storm events up to and including the 1%AEP

event, offering a significant reduction in pluvial flood risk to that area over existing conditions. A further exercise was carried out which confirmed that there is sufficient storage available within the site to ensure that the development will not flood even in the extreme 0.1%AEP pluvial event. The redevelopment of the site will not adversely affect pluvial flood levels or extents in the area.

To mitigate against fluvial flood risk to the site, the Finished Floor Levels (FFL) of the ground floor of the proposed buildings will be set at or above 48.0mOD. This level equates to the 0.1%AEP fluvial flood level including a 20% allowance for climate change and 300mm freeboard. The proposed basement will be isolated from the flood zone and the entrance will be set at a level at or above 48.0mOD.

It is asserted that the proposed development site is wholly located in Flood Zone C and therefore a Justification Test is not strictly required as part of this SSFRA report. However, given that the site is shown within Flood Zones A and B on the DP SFRA mapping it was deemed prudent to complete the Justification Test.

The mitigation measures proposed in this SSFRA will ensure that the development is in compliance with the relevant sections of the Dublin City DP as well as in full compliance with the Dublin City DP SFRA and OPW's The Planning System & Flood Risk Management Guidelines."²

² The reference to mitigation measures here were not considered as part of the screening and this is a direct quote directly from the Flood Assessment.

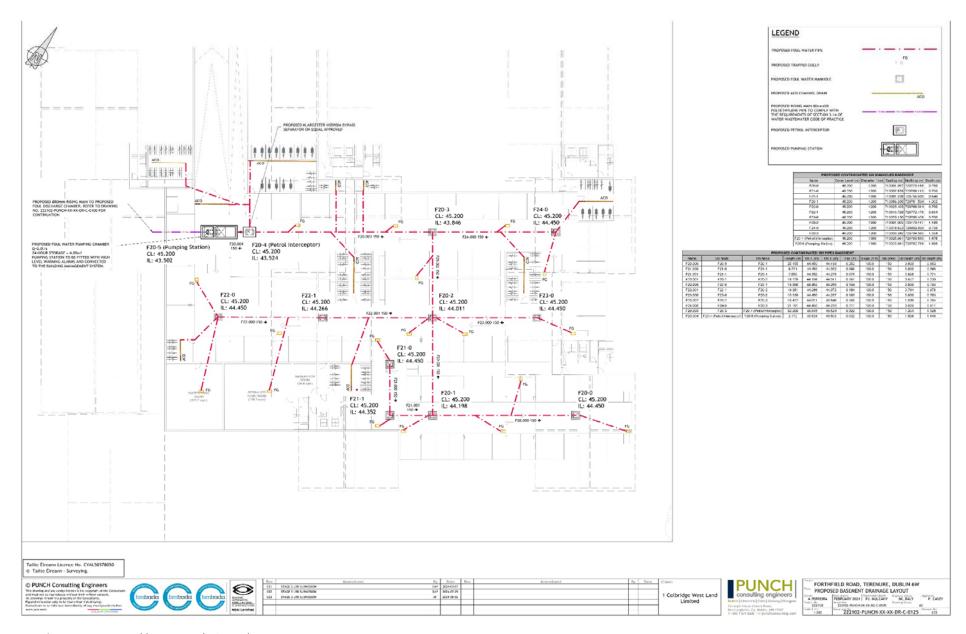


Figure 11. Proposed basement drainage layout



Figure 12. Proposed ground floor drainage layout

Identification of Relevant Natura 2000 Sites

The following section identifies the relevant European sites, with the Zone of Influence of the proposed project and compiles information on their qualifying interests and conservation objectives in addition to outlining the potential for significant effects on each site. The proposed development site is not located within a European site. As outlined in Office of the Planning Regulator (2021)³ "The 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)."

A key factor in the consideration as to whether or not a particular European site is likely to be affected by the proposed works is its distance from the location of the works. It is generally, but not necessarily, the case that the greater the distance from the plan or project the smaller the likelihood of impacts. In this case, the nearest European site to the proposed development is 5.8 km away (South Dublin Bay & River Tolka SPA) (Figure 14). Best practice guidance suggests that an initial zone of influence be set at a radius of 2km for non-linear projects (IEA, 1995 It should be noted that out of an abundance of caution the ZOI was extended to the receiving environment at a distance of 15 km from the project site where there was a potential for the ZOI to be influenced by drainage connections, natural biodiversity corridors e.g. rivers or woodland these were also considered, and the assessment was extended. In the absence of any such direct or indirect connections the receiving environment within 2km of the project site was considered.

There would be a direct hydrological pathway to European sites within the ZOI at Dublin Bay via the proposed surface water strategy via the pond on site. There is a direct hydrological connection (Figures 14-16) from the project site to the aforementioned Natura 2000 sites via the proposed surface water drainage strategy. It is proposed to discharge storm water to the existing onsite pond. This surface water drainage network then outfalls to the River Dodder and ultimately the River Liffey. As the River Liffey flow into Dublin Bay, there is a direct hydrological connection to Natura 2000 sites located along this pathway. Extensive mitigation measures are required to ensure that surface water drainage will not contain silt or pollutants that could significantly impact upon the qualifying interests of these proximate Natura 2000 sites.

Mitigation measures are required to mitigate against the potential impact of contaminated surface water entering Dublin Bay and impacting on the Conservation objectives of Natura 2000 sites.

There is an indirect hydrological pathway to marine-based Natura 2000 sites in Dublin Bay via the proposed foul wastewater drainage network (South Dublin Bay SAC (5.9km), North Dublin Bay SAC (9.6 km), South Dublin Bay & River Tolka SPA (5.8 km), North Bull Island SPA (8.0 km) and North-West Irish Sea SPA (10.4 km)). Foul wastewater from the proposed development will be directed to an existing foul sewerage system. Foul wastewater will then outfall to Ringsend WwTP for treatment. Constituent parts of a project inherent to it, such as SUDS required under a Development plan or under legislation, have been taken into account at screening stage.

No other Natura 2000 sites, beyond those within Dublin Bay are considered to be in the potential Zone of Influence (ZoI). It has been found there are no Natura 2000 sites with a direct/indirect pathway beyond 15km of the subject site.

³ https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf

Table 1. Proximity to designated sites of conservation importance

Site Code	NATURA 2000 Site	Distance
Special Areas	of Conservation	<u>.</u>
IE000210	South Dublin Bay SAC	5.9 km
IE001209	Glenasmole Valley SAC	6.9 km
IE002122	Wicklow Mountains SAC	7.9 km
IE000206	North Dublin Bay SAC	9.6 km
IE000725	Knocksink Wood SAC	11.6 km
IE003000	Rockabill to Dalkey Island SAC	13.6 km
IE000713	Ballyman Glen SAC	13.8 km
IE001398	Rye Water Valley/ Carton SAC	14.0 km
IE000199	Baldoyle Bay SAC	14.8 km
IE000202	Howth Head SAC	14.9 km
IE0004024	South Dublin Bay and River Tolka Estuary SPA	5.8 km
IE0004040	Wicklow Mountains SPA	7.6 km
IE0004006	North Bull Island SPA	8.0 km
IE004236	North-West Irish Sea SPA	10.4 km
IE0004172	Dalkey Islands SPA	13.4 km
IE0004016	Baldoyle Bay SPA	14.8 km

Table 2 provides an overview of the initial screening of Natura 2000 sites within 15km of the subject site. Included within this table are the qualifying interests for each Natura site and the Source/Pathway/Receptor links between the project site and the respective Natura 2000 sites in respect of which the project may have likely significant effects absent mitigation measures). There is no direct or indirect hydrological pathway from the proposed development site to any Natura 2000 sites beyond 15km and no impact is foreseen on these sites.

Table 2. List of NATURA 2000 sites within 15km of project site considered to have potential hydrological connection to the said site

Natura	Name	Screened	Details/Reason
Code		In/Out	
Special Areas of Conservation			
IE0000210	South Dublin	IN	Conservation Objectives
	Bay SAC		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests
			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]
			Potential Impact
			The development site is located within a suburban area 5.9 km from the South Dublin Bay SAC (Figure 13).
			There is a direct hydrological pathway from the proposed development site to this SAC via the proposed connection of surface water drainage to the River Dodder that outfalls to the River Liffey and ultimately the marine environment at Dublin Bay. Mitigation measures are required to ensure that surface water drainage will not contain silt or pollutants that could significantly impact upon the qualifying interests of this Natura 2000 site.
			There is an indirect pathway from the site to this SAC via the proposed foul wastewater network. Foul wastewater will be directed to the existing foul sewer network that outfalls to Ringsend Waste Water Treatment Plant ("WWTP") for treatment. Foul wastewater from the proposed development will be treated in the existing Ringsend WWTP under licence. The indirect pathway of foul water via the public foul sewer network to Ringsend WWPF will not result in a significant effect on this SAC.
			In a strict application of the precautionary principle, it has been concluded that there is the potential for significant effects on the South Dublin Bay SAC in the absence of mitigation measures. This is as a result of the direct hydrological connection from the subject site to this SAC via surface water drainage. For this reason, it is necessary to proceed to a NIS on the effects of the project on this site in view of its conservation objectives.
			Potential for significant effects - Natura Impact Statement Required
IE0000206	North Dublin Bay SAC	IN	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall

Natura	Name	Screened	Details/Reason
Code		In/Out	
		-	maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests
			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] Petalwort (Petalophyllum ralfsii) [1395]
			Potential Impact
			The development site is located within a suburban area 9.6 km from the North Dublin Bay SAC (Figure 13).
			There is a direct hydrological pathway from the proposed development site to this SAC via the proposed connection of surface water drainage to the River Dodder that outfalls to the River Liffey and ultimately the marine environment at Dublin Bay. Mitigation measures are required to ensure that surface water drainage will not contain silt or pollutants that could significantly impact upon the qualifying interests of this Natura 2000 site.
			There is an indirect pathway from the site to this SAC via the proposed foul wastewater network. Foul wastewater will be directed to the existing foul sewer network that outfalls to Ringsend WwTP for treatment. Foul wastewater from the proposed development will be processed in the existing Ringsend Treatment works under licence. The indirect pathway of foul water to Ringsend will not result in a significant effect on the Natura 2000 site.
			In a strict application of the precautionary principle, it has been concluded that there is the potential for significant effects on the North Dublin Bay SAC in the absence of mitigation measures. This is as a result of the direct hydrological connection from the subject site to this SAC via surface water drainage. For this reason, it is necessary to proceed to a NIS on the effects of the project on this site in view of its conservation objectives.
			Potential for significant effects - Natura Impact Statement Required
IE0001209	Glenasmole Valley SAC	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Natura	Name	Screened	Details/Reason
Code		In/Out	
			Features of Interest
			Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]
			Potential Impact
			The proposed development is located 6.9 km from Glenasmole Valley SAC. No likely significant effect is foreseen. There is no direct or indirect hydrological or ecological pathway between the proposed development and the SAC. The construction and operation of the proposed development will not have a likely significant effect on the conservation interests of the site. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site
			No significant effects are likely.
IE0002122	Wicklow	OUT	Conservation Objectives
	Mountains SAC		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests
			Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Alpine and Boreal heaths [4060] Calaminarian grasslands of the Violetalia calaminariae [6130] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] Blanket bogs (* if active bog) [7130] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110] Calcareous rocky slopes with chasmophytic vegetation [8210] Siliceous rocky slopes with chasmophytic vegetation [8220] Old sessile oak woods with llex and Blechnum in the British Isles [91A0] Otter (Lutra lutra) [1355] Potential Impact
			The proposed development site is located in an urban environment 7.9 km from this SAC. No potential significant effect t is foreseen. There is no direct or indirect pathway from the proposed development site to this SAC. The construction and operation of the

Natura	Name	Screened	Details/Reason
Code		In/Out	
			proposed development will not impact on the conservation interests of the site. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site No significant effects likely
IE0000725	Knocksink	OUT	Conservation Objectives
	Wood SAC		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests
			Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion, Alnion incanae, Salicion albae</i>) [91E0]
			Potential Impact
			The proposed development site is located within an urban environment 11.6 km from the Knocksink Wood SAC. No potential significant effect is foreseen. There is no direct or indirect hydrological pathway from the proposed development site to this SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site.
			No significant effects likely
IE0003000	Rockabill to	OUT	Conservation Objectives
	Dalkey Island SAC	Dalkey Island	The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests
			Reefs [1170] Harbour Porpoise (<i>Phocoena phocoena</i>) [1351]
			Potential Impact
			Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] Old sessile oak woods with Ilex and Blechnum in the British Isle [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno Padion, Alnion incanae, Salicion albae</i>) [91E0] Potential Impact The proposed development site is located within an urbai environment 11.6 km from the Knocksink Wood SAC. No potentia significant effect is foreseen. There is no direct or indirect hydrologica pathway from the proposed development site to this SAC. The construction and operation of the proposed development will no impact on the conservation interests of the site. No significant effects likely Conservation Objectives The maintenance of habitats and species within Natura 2000 sites a favourable conservation condition will contribute to the overal maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Reefs [1170] Harbour Porpoise (<i>Phocoena phocoena</i>) [1351] Potential Impact The development site is located within an urban area 13.6 km from this SAC. There is no direct hydrological pathway from the proposed development site to the SAC. There is an indirect pathway from the site to the SAC via the proposed foul / surface water networks. Surface water will be directed to the River Dodder via the onsite pond which outfalls to the River Liffey and ultimately the marine environment at Dublin Bay. Due to the distance ultimately the marine environment at Dublin Bay. Due to the distance
			There is an indirect pathway from the site to the SAC via the proposed foul / surface water networks. Surface water will be directed to the River Dodder via the onsite pond which outfalls to the River Liffey and ultimately the marine environment at Dublin Bay. Due to the distance (13.6 km) via the indirect pathway, any pollutants or silt will settle, be

Natura	Name	Screened	Details/Reason
Code		In/Out	
			dispersed, or diluted within the surface water network and marine environment. The indirect pathway of surface water is not likely to have any significant effect on the conservation objectives of this SAC.
			Foul wastewater will connect via a new connection to the public foul sewer network. This network then outfalls to Ringsend WwTP for treatment. Foul wastewater from the proposed development will be processed in the existing Ringsend WWTP. The indirect pathway of foul water via the public foul sewer network to Ringsend WWPF will not result in a significant effect on this SAC.
			No likely significant effect is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site
			No significant effects likely
IE0000713	Ballyman Glen	OUT	Conservation Objectives
	SAC		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests
			Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230]
			Potential Impact
			The proposed development site is located within an urban environment 13.8 km from this SAC. No potential significant effect is foreseen. There is no direct or indirect hydrological pathway from the proposed development site to this SAC. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site.
			No significant effects likely
IE0001398	Rye Water	OUT	Conservation Objectives
	Valley/ Carton SAC		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Features of Interest
			Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] <i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014] <i>Vertigo moulinsiana</i> (Desmoulin's Whorl Snail) [1016]

Natura	Name	Screened	Details/Reason
Code		In/Out	
			Potential Impact
			The proposed development is 14.0 km from Rye Water Valley/ Carton SAC. No potential significant effect is foreseen. There is no direct or indirect hydrological or ecological pathway between the proposed development and the SAC. The construction and operation of the proposed development will not have a significant effect on the conservation interests of the site. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site
			No significant effects are likely.
IE000199	Baldoyle Bay SAC	OUT	Conservation Objectives
	SAC		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Features of Interest
			Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410]
			Potential Impact
			The subject site is located approximately 14.8 km from Baldoyle Bay SAC. There is no direct pathway from the subject site to this SAC.
			There is a weak indirect pathway to the SAC via the surface and foul water drainage from the proposed development. Surface water will discharge to the onsite pond, which discharges to the River Dodder. The River Dodder ultimately outfalls to the River Liffey and the environment at Dublin Bay.
			Foul water from the subject site will connect via a new connection to the public foul sewer network. The foul water will be treated at Ringsend WwTP prior to being discharged to the Liffey Estuary. However, given the distance from the subject site to this SAC (14.8 km), any pollutants, silt laden run off or dust will be dispersed or diluted to negligible levels within Dublin Bay, prior to reaching this SAC.
			The construction and operation of the proposed development will not have a significant effect on the conservation interests of the site. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site
			No significant effects are likely.

Natura	Name	Screened	Details/Reason
Code	Name	In/Out	Details/ Neason
IE000202	Howth Head	OUT	Conservation Objectives
	SAC		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Features of Interest
			Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]
			Potential Impact
			The subject site is located approximately 14.9 km from Howth Head SAC. It should be noted that the features of interest are terrestrial habitats. There is no direct pathway from the subject site to this SAC.
			There is a weak indirect pathway to the aquatic element of the SAC via the surface and foul water drainage from the proposed development. Surface water will discharge to the onsite pond, which discharges to the River Dodder. The River Dodder ultimately outfalls to the River Liffey and the environment at Dublin Bay. Foul water from the subject site will connect via a new connection to the public foul sewer network. The foul water will be treated at Ringsend WwTP prior to being discharged to the River Liffey Estuary. However, given the distance from the subject site to this SAC (14.9 km), any pollutants, silt laden run off or dust will be dispersed or diluted to negligible levels within Dublin Bay, prior to reaching this SAC. The construction and operation of the proposed development will not
			have a likely significant effect on the conservation interests of the site. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site
			No significant effects are likely.
Special Prote	ection Areas		
IE0004024	South Dublin Bay and River Tolka Estuary SPA	IN	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Special Conservation Interests
			Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Dunlin (Calidris alpina) [A149]

Natura	Name	Screened	Details/Reason
Code	Nume	In/Out	Details, neuson
			Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Redshank (<i>Tringa totanus</i>) [A162] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Wetland and Waterbirds [A999]
			Potential Impact
			The development site is located within an urban area 5.8 km from the South Dublin Bay and River Tolka Estuary SPA.
			There is a direct hydrological pathway from the proposed development site to this SPA via the proposed connection of surface water drainage to the River Dodder that outfalls to the River Liffey Estuary and ultimately the marine environment at Dublin Bay. Mitigation measures are required to ensure that surface water drainage will not contain silt or pollutants that could significantly impact upon the qualifying interests of these proximate Natura 2000 sites.
			There is an indirect pathway from the site to this SPA via the proposed foul wastewater network. Foul wastewater will be directed to the existing foul sewer network that outfalls to Ringsend WwTP for treatment. Foul wastewater from the proposed development will be processed in the existing Ringsend Treatment works. The indirect pathway of foul water to Ringsend will not result in a significant effect on the Natura 2000 site due the treatment of foul water under licence prior to discharge.
			As outlined in the 2023-2024 Wintering Bird Survey Report (Appendix I) -
			'Between November 2023 and March 2024, 9 Winter Bird Surveys were undertaken at grounds at Terenure College, South County Dublin. The survey site itself (1) at the northwest corner of the survey area of Terenure College is part of the playing field areas and is bordered by trees at its outer boundaries. Dividing the survey site area and Terenure Rugby Club to the east is an artificial pitch area. Significant adjacent sites of interest to the survey area are VEC Football club immediately to the east and Bushy Park to the south of the survey area. The survey area playing field areas were checked on all surveys specifically for evidence of Brent Goose scat, these being an excellent indicator of any visitations on-site by the species.
			Similar again to the recording season 2022-2023 Brent Geese were not observed foraging in the Terenure College survey area, and no geese scat was found on-site, from experience surveying other sites it would appear between the high volume of public footfall on the site, combined with the very regular recreational use of the pitches, negates the visitation of Geese to the site. During surveys birds were noted passing over the site (all over the primary survey site -area 1,

Natura	Name	Screened	Details/Reason
Code		In/Out	
			these birds are likely moving between outlying sites, including VEC FC). Results suggest that the site is not an important ex-situ foraging or roosting site for species of qualifying interest from nearby Special protection areas (SPA's).'
			The subject site is open to the public and is regularly disturbed with walkers, joggers and dogs (off lead). Brent Geese or wader species were not noted on the subject site during site assessments and levels of gulls on site were well below the 1% of National Numbers. In addition, discussions with birders living nearby concluded (albeit anecdotal information) that such species have not being seen within the college in recent years.
			The wintering bird assessments indicate that the site is not significant ex-situ foraging or roosting site for any species of qualifying interest from nearby SPA's. As a result, it is considered that there would be no likely significant effects on these species due the loss of the grassland area of the site. However, due to the direct pathway from the construction works and the requirement to implement mitigation measures to prevent downstream impacts on European sites a NIS is required.
			Noise disturbances from the development would be localised to the immediate environs of the site and would not have a likely significant effect on the features of interest of this site.
			In a strict application of the precautionary principle, it has been concluded that significant effects on the South Dublin Bay and River Tolka Estuary SPA are likely, in the absence of mitigation measures, from the proposed works primarily as a result of the direct hydrological connection from the subject site to this SPA via surface water drainage. Mitigation measures are required.
			For these reasons mitigation measures are required and it is necessary to proceed to a NIS on the effects of the project on this site in view of its conservation objectives.
			Significant effects are likely - Natura Impact Statement Required
IE0004006	North Bull	IN	Conservation Objectives
	Island SPA	Island SPA	The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Features of Interest
			Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Teal (<i>Anas crecca</i>) [A052] Pintail (<i>Anas acuta</i>) [A054] Shoveler (<i>Anas clypeata</i>) [A056] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Golden Plover (<i>Pluvialis apricaria</i>) [A140]

Natura	Name	Screened	Details/Reason
Code		In/Out	
			Grey Plover (<i>Pluvialis squatarola</i>) [A141] Knot (<i>Calidris canutus</i>) [A143] Sanderling (<i>Calidris alba</i>) [A144] Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (Numenius arquata) [A160] Redshank (<i>Tringa totanus</i>) [A162] Turnstone (<i>Arenaria interpres</i>) [A169] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Wetland and Waterbirds [A999]
			Potential Impact
			The proposed development is located 8.0 km from North Bull Island SPA (Figure 15).
			There is direct hydrological pathway from the proposed development to this SPA via surface water drainage network. Surface water from the development will discharge to the onsite pond which discharges to the River Dodder and ultimately the River Liffey and the marine environment at Dublin Bay. In the absence of mitigation measures, it is considered significant effects on the conservation objectives of this SPA are likely as a result of the direct hydrological pathway.
			There is an indirect hydrological connection to this SPA via foul wastewater drainage. Foul water from the proposed development will be discharged via a new connection to the existing foul sewer network. However, given the distance (8.0 km) via the indirect pathway and that the foul water will be treated under licence before being discharged to the Liffey Estuary at Ringsend, any silt laden run off, pollutants or dust would be diluted or dispersed and will not result in significant effects on this SPA.
			As outlined in the 2023-2024 Wintering Bird Survey Report (Appendix I) -
			'Between November 2023 and March 2024, 9 Winter Bird Surveys were undertaken at grounds at Terenure College, South County Dublin. The survey site itself (1) at the northwest corner of the survey area of Terenure College is part of the playing field areas and is bordered by trees at its outer boundaries. Dividing the survey site area and Terenure Rugby Club to the east is an artificial pitch area. Significant adjacent sites of interest to the survey area are VEC Football club immediately to the east and Bushy Park to the south of the survey area. The survey area playing field areas were checked on all surveys specifically for evidence of Brent Goose scat, these being an excellent indicator of any visitations on-site by the species.
			Similar again to the recording season 2022-2023, Brent Geese were not observed foraging in the Terenure College survey area, and no geese scat was found on-site, from experience surveying other sites it would appear between the high volume of public footfall on the site,

Natura	Name	Screened	Details/Reason
Code		In/Out	
			combined with the very regular recreational use of the pitches, negates the visitation of Geese to the site. During surveys birds were noted passing over the site (all over the primary survey site -area 1, these birds are likely moving between outlying sites, including VEC FC). Results suggest that the site is not an important ex-situ foraging or roosting site for species of qualifying interest from nearby Special protection areas (SPA's).'
			The subject site is open to the public and is regularly disturbed with walkers, joggers and dogs (off lead). Brent Geese or wader species were not noted on the subject site during site assessments and levels of gulls on site were well below the 1% of National Numbers. In addition, discussions with birders living nearby concluded (albeit anecdotal information) that such species have not being seen within the college in recent years. The wintering bird assessment suggests that the site is not an important ex-situ foraging or roosting site for any species of qualifying interest from nearby SPA's. As a result, it is considered that there would be no likely significant effects on these species due the loss of the grassland area of the site. However, due to the direct pathway from the construction works and the requirement to implement mitigation measures to prevent downstream impacts on European sites a NIS is required.
			Noise disturbances from the development would be localised to the immediate environs of the site and would not have a significant impact on the features of interest of this site.
			For these reasons mitigation measures are required and it is necessary to proceed to a NIS on the effects of the project on this site in view of its conservation objectives.
			A Natura Impact Statement is required for this site.
IE004236	North-West Irish Sea SPA	IN	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Special Conservation Interests
			Red-throated Diver (Gavia stellata) [A001] Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] 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]

Natura	Name	Screened	Details/Reason
Code		In/Out	
			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]
			Potential Impact The development site is located within a suburban area 7.7 km from the North-West Irish Sea SPA (Figure 14).
			There is direct hydrological pathway from the proposed development to this SPA via surface water drainage network. Surface water from the development will discharge to the onsite pond which discharges to the River Dodder and ultimately the River Liffey and the marine environment at Dublin Bay. In the absence of mitigation measures, it is considered significant effects on the conservation objectives of this SPA are likely as a result of the direct hydrological pathway.
			There is an indirect hydrological connection to this SPA via foul wastewater drainage. Foul water from the proposed development will be discharged via a new connection to the existing foul sewer network. However, given the distance (7.7 km) via the indirect pathway and that the foul water will be treated under licence before being discharged to the Liffey Estuary at Ringsend, any silt laden run off, pollutants or dust would be diluted or dispersed and will not result in significant effects on this SPA.
			As outlined in the 2023-2024 Wintering Bird Survey Report (Appendix I) -
			'Between November 2023 and March 2024, 9 Winter Bird Surveys were undertaken at grounds at Terenure College, South County Dublin. The survey site itself (1) at the northwest corner of the survey area of Terenure College is part of the playing field areas and is bordered by trees at its outer boundaries. Dividing the survey site area and Terenure Rugby Club to the east is an artificial pitch area. Significant adjacent sites of interest to the survey area are VEC Football club immediately to the east and Bushy Park to the south of the survey area. The survey area playing field areas were checked on all surveys specifically for evidence of Brent Goose scat, these being an excellent indicator of any visitations on-site by the species.
			Similar again to the recording season 2022-2023, Brent Geese were not observed foraging in the Terenure College survey area, and no geese scat was found on-site, from experience surveying other sites it would appear between the high volume of public footfall on the site, combined with the very regular recreational use of the pitches, negates the visitation of Geese to the site. During surveys birds were noted passing over the site (all over the primary survey site -area 1,

Natura Code	Name	Screened In/Out	Details/Reason
Code		inyout	these birds are likely moving between outlying sites, including VEC FC). Results suggest that the site is not an important ex-situ foraging or roosting site for species of qualifying interest from nearby Special protection areas (SPA's).'
			Noise disturbances from the development would be localised to the immediate environs of the site and would not have a significant impact on the features of interest of this site.
			The subject site is open to the public and is regularly disturbed with walkers, joggers and dogs (off lead). Brent Geese or wader species were not noted on the subject site during site assessments and levels of gulls on site were well below the 1% of National Numbers. In addition, discussions with birders living nearby concluded (albeit anecdotal information) that such species have not being seen within the college in recent years. The wintering bird assessment suggests that the site is not an important ex-situ foraging or roosting site for any species of qualifying interest from nearby SPA's. As a result, it is considered that there would be no likely significant effects on these species due the loss of the grassland area of the site. However, due to the direct pathway from the construction works and the requirement to implement mitigation measures to prevent downstream impacts on European sites a NIS is required.
			For these reasons mitigation measures are required and it is necessary to proceed to a NIS on the effects of the project on this site in view of its conservation objectives.
			A Natura Impact Statement is required for this site.
IE0004040	Wicklow Mountains SPA	OUT	Conservation Objectives To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
			Special Conservation Interests Merlin (Falco columbarius) [A098] Peregrine (Falco peregrinus) [A103]
			Potential Impact The proposed development site is located within an urban environment 7.6 km from this SPA. No potential impact is foreseen. There is no direct or indirect hydrological pathway from the proposed development site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site. Owing to the nature, size and location of the proposed development will not impact on the conservation interests of the site
			No significant effects likely
IE0004172	Dalkey Islands SPA	OUT	Conservation Objectives To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
			Special Conservation Interests

Natura	Name	Screened	Details/Reason
Code		In/Out	
			Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194]
			Potential Impact The proposed development site is located within an urban environment 13.4 km from this SPA (Figure 12). There is no direct hydrological pathway from the proposed development to this SPA.
			There is a weak indirect pathway from the site to the SPA via the proposed foul / surface water networks. Surface water will be directed to the River Dodder via the onsite pond and ultimately the River Liffey and marine environment at Dublin Bay. Due to the distance (13.4 km) via the indirect pathway, any pollutants or silt will settle, be dispersed, or diluted within the marine environment. The indirect pathway of surface water is not likely to impact on the conservation objectives of this SPA.
			Foul wastewater from the subject site will connect via a new connection to the public foul sewer network. This network then outfalls to Ringsend WwTP for treatment. Foul wastewater from the proposed development will be processed in the existing Ringsend Treatment works. The indirect pathway of foul water to Ringsend will not result in a significant effect on this SPA.
			No potential significant effect is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site
			No significant effects likely
IE004016	Baldoyle Bay	OUT	Conservation Objectives
	SPA		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Features of Interest
			Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Bar-tailed Godwit (Limosa lapponica) [A157] Wetland and Waterbirds [A999] Potential Impact
			The proposed development site is located within an urban environment 14.8 km from this SPA (Figure 12). There is no direct hydrological pathway from the proposed development to this SPA.

Natura	Name	Screened	Details/Reason
Code		In/Out	
			There is a weak indirect pathway from the site to the SPA via the proposed foul / surface water networks. Surface water will be directed to the River Dodder via the onsite pond and ultimately the River Liffey and marine environment at Dublin Bay. Due to the distance (14.8 km) via the indirect pathway, any pollutants or silt will settle, be dispersed, or diluted within the marine environment. The indirect pathway of surface water is not likely to impact on the conservation objectives of this SPA.
			Foul wastewater from the subject site will connect via a new connection to the public foul sewer network. This network then outfalls to Ringsend WwTP for treatment. Foul wastewater from the proposed development will be processed in the existing Ringsend Treatment works. The indirect pathway of foul water to Ringsend will not result in a significant effect on this SPA.
			As outlined in Appendix II of the NIS 'In February and March 2022 eight winter bird surveys and a breeding bird survey in May 2022 were undertaken at Terenure College in South County Dublin, dedicated to identifying the avifauna wintering in the College, particularly if any species foraging or roosting in the park are of qualifying interest from nearby SPA's (Special protection area's). The college grounds include well-maintained playing fields which are potentially attractive feeding areas for species like Brent Geese and wader species.
			The results suggest that the site is not an important ex-situ foraging or roosting site for any species of qualifying interest from nearby SPA's. Close monitoring of the pitches did not record any visitations whatsoever of Brent Geese or wader species (in a Dublin context that would be Curlew, Oystercatcher and Black-tailed Godwit). Consultation with locals visiting the college and birders living nearby the surveyor is familiar with concluded (albeit anecdotal information) that such species have not being seen within the college in recent years.'
			It should be noted however, that as outlined in Appendix II 'The surveys revealed the dominant species foraging on the pitches and playing areas were gull species, namely Black-headed Gulls (counts of upwards to 150-200), Common Gulls (averaging c.10-30), Herring Gulls (averages of 10-20) and occasional Lesser black-backed and Mediterranean Gull. The foraging area preferred by these species were almost exclusively areas 2 and 3 ⁴ , with the slightly longer sward length in area 1 ⁵ suboptimal for foraging gulls.' Areas 2 and 3 are not part of the subject site.
			The subject site is open to the public and is regularly disturbed with walkers, joggers and dogs (off lead). Brent Geese or wader species were not noted on the subject site during site assessments. In addition, discussions with birders living nearby concluded (albeit

⁴ Outside the proposed development site. ⁵ Within the proposed development site.

Natura Code	Name	Screened In/Out	Details/Reason
			anecdotal information) that such species have not being seen within the college in recent years. The wintering bird assessment suggests that the site is not an important ex-situ foraging or roosting site for any species of qualifying interest from nearby SPA's. As a result, it is considered that there would be no likely significant effects on these species due the loss of the grassland area of the site.
			Noise disturbances from the development would be localised to the immediate environs of the site and would not have a significant impact on the features of interest of this site.
			The construction and operation of the proposed development will not have a significant effect on the conservation interests of the site.
			No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site
			No significant effects likely

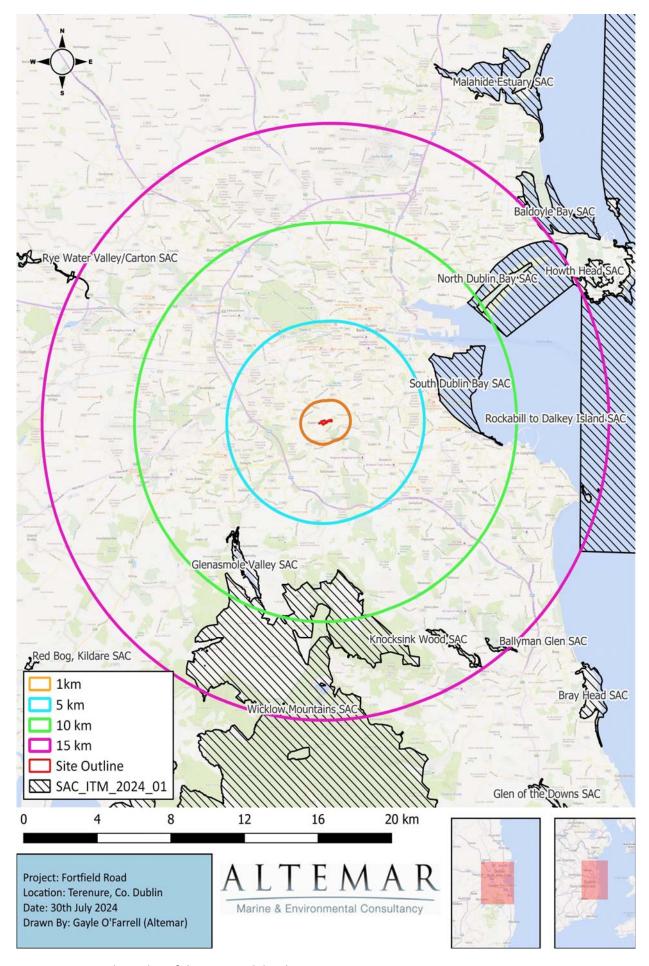


Figure 13. SACs within 15km of the proposed development

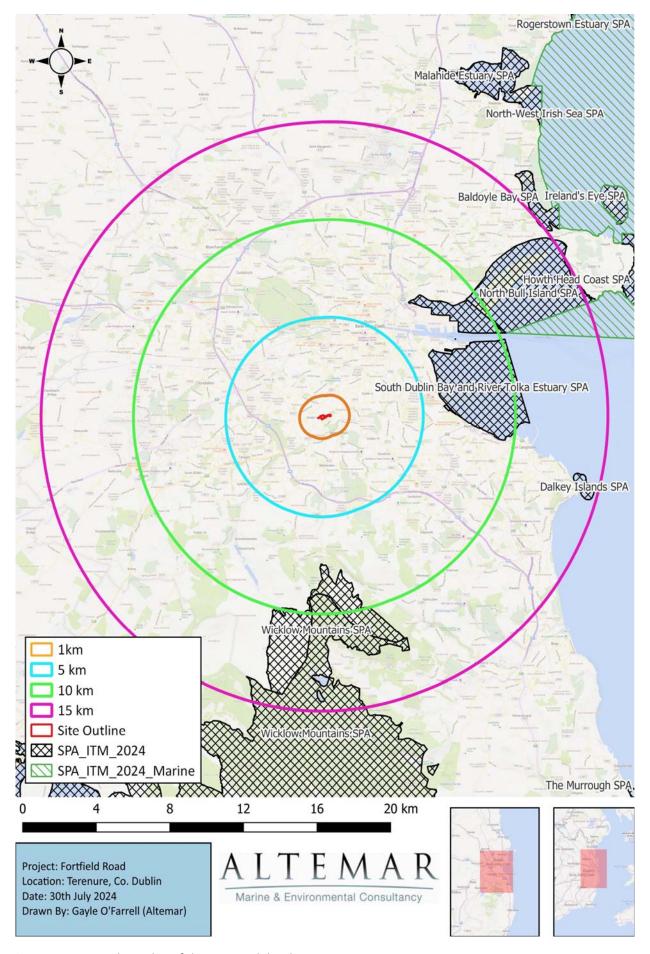


Figure 14. SPAs within 15km of the proposed development



Figure 15. Watercourses proximate of proposed development

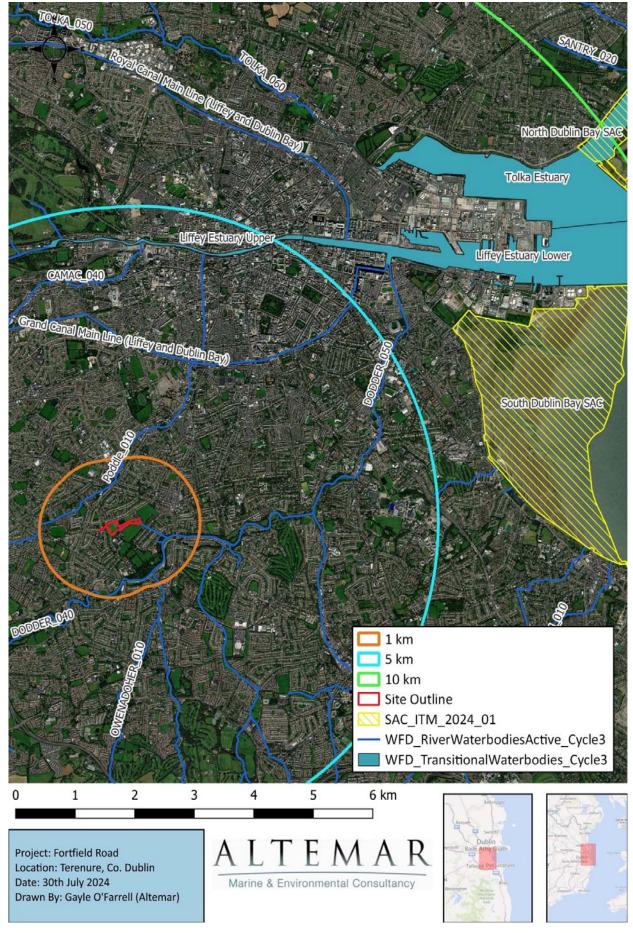


Figure 16. Watercourses and SACs proximate of the proposed development site

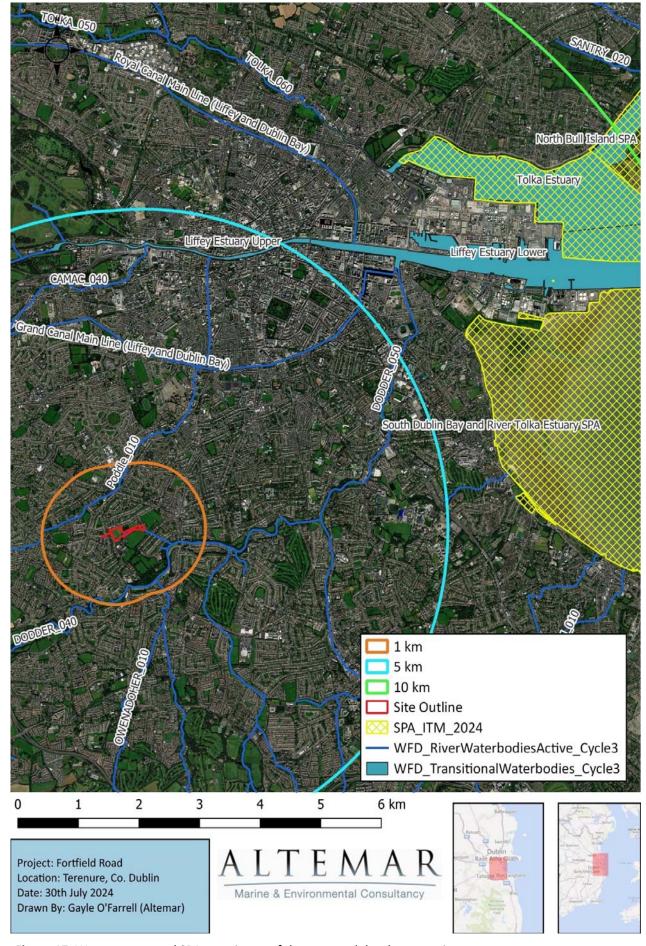


Figure 17. Watercourses and SPAs proximate of the proposed development site

In-Combination Effects

There are several proposed developments located in the area immediately surrounding the subject site. The following is a list of planning applications in close proximity to the subject site as identified on the Department of Housing, Local Government and Heritage's 'National Planning Application Database' portal⁶,:

The below projects have been granted planning permission by Dún Laoghaire-Rathdown County Council (DLRCC) or An Bord Pleanála (ABP).

Table 3. In-combination effects considered

DLRCC/ ABP Reg. Ref.	Address	Overview of Development
4510/22	Terenure Rugby Football Club, 'Lakelands', Greenlea Grove, Terenure, Dublin 6W	- RETENTION: Permission for the retention of 1no. cafe facility, 3m x 2.4m x2.57m with a store space of 3.06m x 1.63m x 2.57m, presently located in the parking lot alongside the existing club house, and 1no. charcoal pizza facility, 4.7m x2.5m x2.57m located at the southern end of the parking lot adjacent to the main grass pitch at a 2.73 hectare site at Terenure Rugby Football Club, 'Lakelands', Greenlea Grove, Terenure, Dublin 6W. The site is accessed via Greenlea Grove.
SD22A/0404	Templeogue College, Templeville Road, Dublin 6	The development will consist of the change of use of Templeogue College Community Residence and garage (c.767sqm) to a special educational needs school. The proposed works consists of the following; 1) reconfiguration and refurbishment (internal and external alterations) of existing building with new extension (c.9sqm) to the rear. The revised internal layout consists of 4no. classrooms and related ancillary school facilities (including reception area, principal's office, meeting room, living skills room, staff room, student and staff WC. 's and shower room, a sensory room, storage and new stairs. 2) reconfiguration of existing garage for rear access. The development will also consist of associated minor alterations to the existing facades and siteworks to facilitate the proposed development: 1) replace all existing windows, 2) new external classroom doors on the Western elevation, 3) new gently sloped access ramps and external covered walkways to the North, East and West elevations 4) 5 no. new car parking spaces and drop-,off point. 5) development of rear garden to include landscaping for 2no. soft play areas. 6) a new pedestrian access from Temple Ville Road
2033/19	ETB Sports Grounds, Templeogue Road, Terenure, Dublin 6W	The development will consist of alteration to existing boundary wall, including relocation of pillars and gates, to improve visibility and sightlines at existing vehicular entrance at Templeogue Road.
2997/20	Terenure Sports Club, 54, Terenure Road North, Dublin 6W	Planning permission for the removal of two existing single storey prefabricated changing room buildings, and the installation of two new single storey prefabricated changing room buildings in their place, with associated site works.
2134/18	St. Pancras Works, Mount Tallant Avenue, Terenure, Dublin 6W	PROTECTED STRUCTURE: Planning permission for development consisting of amendments and additions to a previously permitted development Reg. Ref 2710/14, 4296/15, 3609/16 and PL 29S.244337 comprising:

6 https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de

DLRCC/ ABP Reg. Ref.	Address	Overview of Development
		 (a) the replacement of 6 no. permitted apartments (2 no. 1 bed, 2 no. 2 bed, 2 no. 3 bed) with 8 no. apartments (2 no. 1 bed, 6 no. 2 bed) all at Third Floor level; (b) the provision of 3 no. additional apartments (1 no. 2 bed, 2 no. 3 bed) and associated access core and balconies at a new set-back Fourth Floor level; (c) elevational changes to all facades; (d) all associated works including balconies, rooflights, infrastructural works, car parking and landscaping. The 1.39 hectare (3.44 acres) site is accessed by an existing gateway from Mount Tallant Avenue, including piers and railings on a plinth wall which is a Protected Structure. No works are proposed to the Protected Structure as part of this planning application.
D17A/0716/C2	Castle Golf Club, Woodside Drive, Rathfarnham, Dublin 14	Compliance re Condition no. 4. Permission for: 1. Demolition of existing single storey Caddy Masters building and general Store and construction of new single storey Caddy Masters building and single storey extension to existing Clubhouse Pro-Shop and bar store room with associated internal alterations. 2. Demolition of existing single storey Clubhouse kitchen service access, stores and plant rooms as well as kitchen extract and boiler chimney and construction of new two storey extension comprised of kitchen access stairway, stores, plant rooms and furniture store, including new rooftop mechanical plant installation in screened enclosure, new boiler with external flue as well as interior remodelling of existing kitchen and associated internal alterations. 3. Construction of new single storey coaching bay building adjacent to the existing practise tees and main entrance driveway off Woodside Drive. 4. Associated hard and soft landscape works, surface water attenuation works as required and associated general site works.
SD17A/0263	Grange Golf Club, Taylor's Lane, Rathfarnham, Dublin 16	The extension of the golf course playing area into the carpark located towards the north-western corner of the site, resulting in the loss of 16 car parking spaces; landscaping works and all associated works above and below ground (a Protected Structure).
2571/19	The High School, Zion Road, Rathgar, Dublin 6	 The development will consist of the replacement of an existing prefab shed with a new portal frame shed for use as maintenance machinery storage and associated site works.
SD14A/0204 SD04A/0242/FE	St. Pius X Boys National School, Fortfield Park, Terenure, Dublin 6W Former Eircom Training	 Construction of a 15sq.m single storey flat roofed universal access toilet with ancillary and enabling works within an existing internal courtyard. The modified development will consist of the construction
P	Centre, Wainsford Road, Terenure, Dublin 6W.	of a reduced number of 189 no. residential units comprising: 4 no. 3-storey 5/6 bedroom detached houses; 18 no. 3- storey 5 bedroom detached houses; 12 no. 3-storey 5 bedroom semi-detached houses; 31 no. 4 bedroom and 13 no. 3 bedroom townhouses in 12 no. 2 and 2.5 storey blocks; 2 no. 4 bedroom 2 storey detached houses (formerly semi- detached); 109 no. 1, 2 and 3 bedroom apartments with associated balconies and 263sq.m. fitness centre located in 3 no. 4 storey blocks over semi-basement car park; one sheltered housing unit containing 51 1 and 2 bedroom suites and communal facilities in a 4 storey block over semi- basement car park; a reduced 2 storey 200sq.m. crèche; and ancillary works including relocated sub-surface waste and

DLRCC/ ABP Reg. Ref.	Address	Overview of Development
		surface water holding tanks; demolition of existing buildings within the site; on lands comprising the former Eircom Training Centre. Vehicular access to the proposed development would be provided from Wainsfort Manor Drive.
3959/21	Leo Pharma , 285 Cashel Road, Dublin 12	 Planning permission for the development will consist of construction of a single storey commodity store between buildings L and C and all associated site woks.

There are no significant projects that have been granted planning or currently under construction, proximate to the development, that could potentially cause in combination effects on European sites. Owing to the nature, size and location of the project it is predicted that the construction and operation of the proposed development will not impact on the conservation interests of the site in combination with other projects. This includes the significant distance to designated sites and the fact that

Given this, it is considered that there are no in-combination likely significant effects of the project with other existing and proposed developments. Any predicted effects are predicted to be neutral, insignificant and localised. It is concluded that no significant effects on Natura 2000 sites will occur due to the proposed development in combination with other projects. No in-combination effects are foreseen.

No significant effects are likely from in-combination effects.

Conclusions

An AA Stage 1 screening of the effects of the proposed project on European Sites (scoped in as described in Table 2), of using the precautionary principle and the Source/Pathway/Receptor model predicts the project does not have the potential to result in likely significant effects on the conservation objectives and Qualifying Interests of the European sites hereunder. Based on best scientific knowledge and objective information and assessment, the possibility of significant effects caused by the proposed project on its own or in combination with other projects can be can be excluded for those aforementioned European sites:

Special Areas of Conservation

Site Code	NATURA 2000 Site
IE0001209	Glenasmole Valley SAC
IE0002122	Wicklow Mountains SAC
IE0000725	Knocksink Wood SAC
IE0003000	Rockabill to Dalkey Island SAC
IE0000713	Ballyman Glen SAC
IE001398	Rye Water Valley/Carton SAC
IE000199	Baldoyle Bay SAC
IE000202	Howth Head SAC

Special Protection Areas

Site Code	NATURA 2000 Site
IE0004040	Wicklow Mountains SPA
IE0004172	Dalkey Islands SPA
IE0004016	Baldoyle Bay SPA

Having taken into consideration the proposed project, the surface water strategy for the project, the distance between the proposed development site and designated conservation sites, the direct hydrological pathway link to certain designated conservation sites located within Dublin Bay, it is concluded that this development has the potential to give rise to impacts on designated sites. The construction and operation of the proposed development has the potential to impact on the conservation objectives/features of interest of five Natura 2000 sites: South Dublin Bay SAC (5.9km), North Dublin Bay SAC (9.6 km), South Dublin Bay & River Tolka SPA (5.8 km), North Bull Island SPA (8.0 km) and North-West Irish Sea SPA (10.4 km).

Acting on a strictly precautionary basis, an NIS is required in respect of the effects of the project on these European sites because it cannot be excluded on the basis of best objective scientific information following screening, in the absence mitigation measures that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the named European Site/s.

An NIS or Stage 2 Appropriate Assessment is not required for the effects of the project on all other listed Natura sites above because any likely significant effect can be excluded on the basis of the best objective scientific information following screening that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the European Site/s.

A Natura Impact Statement is required for the proposed development.

References

- Department of Environment Heritage and Local Government Circular NPW 1/10 and PSSP 2/10 on Appropriate Assessment under Article 6 of the Habitats Directive – Guidance for Planning Authorities March 2010.
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities,
 Department of the Environment, Heritage and Local Government 2009;
 https://www.npws.ie/sites/default/files/publications/pdf/NPWS 2009 AA Guidance.pdf
- 3. Managing NATURA 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC, European Commission 2018; http://ec.europa.eu/environment/nature/natura2000/management/guidance en.htm.
- 4. Assessment of plans and projects in relation to Natura 2000 sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC1028(02)
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC Clarification of the concepts
 of: alternative solutions, imperative reasons of overriding public interest, compensatory measures,
 overall coherence, opinion of the commission;
 http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/guidance_art6_4_en.p
- 6. European Commission, Directorate-General for Environment, *Guidelines on the implementation of the birds and habitats directives in estuaries and coastal zones : with particular attention to port development and dredging*, Publications Office, 2012, https://data.europa.eu/doi/10.2779/44024
- The Status of EU Protected Habitats and Species in Ireland.
 http://www.npws.ie/publications/euconservationstatus/NPWS_2007_Conservation_Status_Report.pd
- 8. NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- 9. NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- 10. NPWS (2012) Conservation Objectives: Baldoyle Bay SAC 000199. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- 11. NPWS (2013) Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- 12. NPWS (2016) Conservation Objectives: Howth Head SAC 000202. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
- 13. NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
- 14. NPWS (2021) Conservation Objectives: Glenasmole Valley SAC 001209. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
- 15. NPWS (2021) Conservation Objectives: Knocksink Wood SAC 000725. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
- 16. NPWS (2019) Conservation Objectives: Ballyman Glen SAC 000713. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
- 17. NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- 18. NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
- 19. NPWS (2013) Conservation Objectives: Baldoyle Bay SPA 004016. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

- 20. NPWS (2022) Conservation objectives for Dalkey Islands SPA [004172]. First Order Site specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.
- 21. NPWS (2022) Conservation objectives for Howth Head Coast SPA [004113]. First Order Site specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.
- 22. NPWS (2023) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
- 23. NPWS (2022) Conservation objectives for Wicklow Mountains SPA [004040]. First Order Site-specific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.
- 24. Office of the Planning Regulator (2021). OPR Practice Note PN01 Appropriate Assessment Screening for Development Management https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf

Appendix I Winter Bird Surveys 2023-2024

Terenure College, Dublin, Winter Bird Surveys 2023-2024

1. Introduction

Between November 2023 and March 2024 9 Winter Bird Surveys were undertaken at grounds at Terenure College, South County Dublin by Hugh Delaney, a freelance Ecologist (Birds primarily) Hugh has extensive experience surveying numerous sites with ecological consultancies over 12+ years. Hugh is local to the Dun Laoghaire-Rathdown area in Dublin and is especially familiar with the bird life and its ecology in its environs and elsewhere in the country going back over 35 years.

2. Winter Bird Survey Methodology

Winter bird surveys are conducted from soon after sunrise until late in the afternoon, or alternatively started later in the day until sunset, a survey period is a minimum of six hours, the site is monitored throughout the survey period and all bird species utilizing the site recorded, including species flying through site area overhead. Checks are also made on suitable habitat nearby or adjacent to the site for comparative purposes and to monitor any interchange of birds between sites. Target species (species of more special interest) utilizing the site are mapped and estimates of the time these species frequented the site are recorded.





Fig. 1. Terenure College Bird Survey area (encircled in red), the site was divided into the following areas for the purposes of the surveys –

- 1. Primary survey site.
- 2. Main playing fields area.
- 3. Secondary playing fields area.
- 4. Terenure College Rugby grounds.
- 5. VEC Football Club grounds.
- 6. Lakelands area (encircled in blue).

3. Site Description

The site is a parkland-type area situated in suburban south Dublin, at the east side of the site Terenure College and grounds are located and adjacent to this are large areas of playing fields bordered at the boundaries by large trees. A significant feature of the site is the 'Lakelands' area which features a slow-moving water body that moves from west to east via an underground channel arising from the west side that exists the site via a channel underground at the east side passing through the north side of the site, it is bordered also by large trees (notably mainly Holm Oak on the north side) and contains some tree covered islets. The survey site itself (1) (Fig 1) at the northwest corner of the survey area of Terenure College is part of the playing field areas and is bordered by trees at its outer boundaries. Dividing the survey site area and Terenure Rugby Club to the east is an artificial pitch area.

Significant adjacent sites of interest to the survey area are VEC Football club immediately to the east and Bushy Park to the south of the survey area.

4. Specific site survey methodology

The site and areas within were comprehensively surveyed during the surveys, twice monthly with an early visit and a later visit made alternately, all areas including the survey site (1) were checked at least hourly during the survey periods, by way of a cyclical check around the site on foot and bicycle (also large portion of site area is viewable simultaneously at the west side of Lakelands). In addition, several dedicated specific counts of the Lakelands area were completed during surveys in order to document the waterbird species numbers present in this area. Outlying sites adjacent to the survey area were also checked during surveys, these specifically being VEC football grounds to the east and Bushy Park to the south. The survey area playing field areas were checked on all surveys specifically for evidence of Brent Goose scat, these being an excellent indicator of any visitations on-site by the species.

5. Survey Results

a) November 30th, 2023

Sunrise- 08.15hrs/Sunset 16.12hrs. Weather – Wind Northwest F4, Cloud 4/8, Light showers, 5c, Excellent visibility. On-site 10.00hrs – 16.00hrs.

Species recorded – Brent Goose (flyover only), Mallard, Little Grebe, Little Egret, Grey Heron, Moorhen, Coot, Black-headed Gull, Common Gull, Herring Gull, Feral Pigeon, Woodpigeon, Pied Wagtail, Grey Wagtail, Robin, Song Thrush, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Greenfinch.

10.00hrs-12.00hrs – Survey commenced at the survey site (1) north of the Terenure College, grass sward length here was estimated at 20+cm in areas and appeared to be no longer being tended (i.e. mown to a playing field standard like the other playing field areas), the other playing field areas were of normal short-cropped playing field standard. The longer grass length here was deemed not to be conducive to foraging species such as Brent Geese, Gull species or wader species (only possible exception being perhaps Curlew). No species recorded. A flock of Brent Geese (<19) were observed flying east over the north end of Area 1 at 10.36hrs (height 20m) and were headed towards the VEC FC site (Brent were later recorded there), the birds not landing into the site. 10.44hrs another flock of Brent Geese (<70) followed the same flight path over area 1 and also appeared to land into VEC FC. Starling (<70) foraging in area 1 were the only species noted foraging in this area. At area 2 Blackheaded Gulls roosting and foraging peaked at 24 at 11.40hrs, with single Herring Gull and Common Gull also noted. At area 3 peak numbers of Black-headed Gull (<42) and Common Gull (<1) were noted foraging at 11.37hrs. A single Common Gull was observed foraging in area 4 (Terenure Rugby Grounds) at 11.50rs.

A waterbird survey of the Lakelands from 10.50-11.10hrs recorded – Mallard (13), Little Grebe (<3), Little Egret (<1), Grey Heron (<1), Moorhen (<18) and Coot (<1).

12.00hrs-16.00hrs — At VEC FC Brent Geese (<29) were foraging at 12.10hrs and all 29 were still present there at 14.40hrs. At area 1 Starling (<40) and Goldfinch (<6) were noted foraging during the afternoon, no other species foraging on-site. No species recorded foraging at area 4 during the afternoon. At area 2 foraging Gull numbers peaked at 13.55hrs with Black-headed Gull (<24), Common Gull (<3) and Herring Gull (<1) noted. At area 3 Gull numbers peaked at 13.45hrs with Black-headed Gull (<28) and Common Gull (<1) present.

A waterbird survey of the Lakelands from 14.10-14.30hrs recorded – Mallard (14), Little Grebe (<3), Little Egret (<1), Moorhen (<16) and Coot (<1).

Passerine species recorded around the site were again typical of a suburban Dublin parkland, Pied Wagtail (<2) and Mistle Thrush (<2) recorded foraging on the playing fields, Grey Wagtail (<1) at the Lakelands, the woodland around the lakelands was again the most productive area for passerine species, four Tit species, Goldcrest (<2), Goldfinch (<12), Chaffinch (<5) and Greenfinch (<2) present in this area.

A check of all the suitable playing fields found did not locate Brent Goose scat.

b) December 8th, 2023

Sunrise- 08.26hrs/Sunset 16.07hrs. Weather – Wind Southwest F3, Cloud 6/8, Dry, 9c, Excellent visibility. Onsite 08.30hrs – 14.30hrs.

Species recorded – Brent Goose (flyover & offsite only), Mallard, Tufted Duck, Little Grebe, Little Egret, Grey Heron, Sparrowhawk, Moorhen, Coot, Black-headed Gull, Common Gull, Herring Gull, Feral Pigeon, Woodpigeon, Pied Wagtail, Grey Wagtail, Robin, Song Thrush, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin. 08.30hrs-12.00hrs – Survey commenced at area 3 and onwards to area 1, area 4, and area 2 etc. At area 3 peak counts of foraging Gulls were Black-headed Gull (<33), Herring Gull (<5) and Common Gull (<8) recorded at 10.05hrs, averaging about 20 Black-headed Gull during the remainder of the morning. At area 1 a flock of Brent Geese (<11) were observed flying northwest over the middle of the site at 09.10hrs (height 25m), Starling (<25), Goldfinch (<10) and Meadow Pipit (<2) were the only species noted foraging here during the morning. Common Gull (<3) and Black-headed Gull (<4) were noted in area 4 at 10.45hrs only. At area 2 Gull numbers peaked at 10.15hrs with Black-headed Gull (<58), Common Gull (<10) and Herring Gull (<5) noted foraging. At VEC FC Brent Geese (<120) were noted foraging at 11.30hrs (off-site).

A waterbird survey of the Lakelands from 10.00-10.30hrs recorded – Mallard (22), Tufted Duck (<2), Little Grebe (<3), Little Egret (<1), Grey Heron (<2), Moorhen (<15), Coot (<2) and Kingfisher (<1).

<u>12.00hrs-14.30hrs</u> — At VEC FC the Brent Geese flock (<120) were foraging at 12.45hrs, and not recorded thereafter. At area 1 Starling (<30) and Goldfinch (<15) were noted foraging during the afternoon, no other species foraging on-site. No species recorded foraging at area 4 during the afternoon. At area 2 foraging Gull numbers peaked at 12.15hrs with Black-headed Gull (<45), Common Gull (<6) and Herring Gull (<12) noted. At area 3 Gull numbers peaked at 12.50hrs with Black-headed Gull (<30) and Herring Gull (<3) present.

A waterbird survey of the Lakelands from 13.15-13.45hrs recorded – Mallard (17), Tufted Duck (<2), Little Grebe (<3), Little Egret (<1), Moorhen (<14) and Coot (<2).

Mistle Thrush (<2) recorded foraging on the playing fields at area 3 and 2, around the lakelands four Tit species, Goldcrest (<3), Goldfinch (<15), Chaffinch (<10) and Siskin (<5) were present in this area. A Sparrowhawk was observed hunting at the Lakelands at 12.20hrs.

A check of all the suitable playing fields found did not locate Brent Goose scat.

c) December 19th, 2023

Sunrise- 08.36hrs/Sunset 16.07hrs. Weather – Wind West F2, Cloud 3/8, Dry, 5c, Excellent visibility. On-site 09.30hrs – 15.30hrs.

Species recorded –Brent Geese (flyover only), Mute Swan, Mallard, Tufted Duck, Little Grebe, Grey Heron, Moorhen, Coot, Black-headed Gull, Common Gull, Mediterranean Gull, Herring Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin.

<u>09.30hrs-12.00hrs</u> – Surveys commenced on arrival at area 3 at entrance, and onwards to area 1, Lakelands, area 4 etc. At area 3 foraging gull numbers peaked at Black-headed Gull (<42), Common Gull (<6) and Herring Gull (<5) at 10.52hrs. At area 1 no foraging species were noted during morning, Starling (<20), Redwing (<5) and Goldfinch (<12) noted around the site. Common Gull (<3) were noted foraging in area 1 intermittently during morning. At Area 2 a peak morning count of Black-headed Gull (<54), Mediterranean Gull (<2), Herring Gull (<9) and Common Gull (<16) were noted roosting and foraging at 10.35hrs, also Redwing (<25) noted foraging around the area. No Brent Geese noted in VEC FC or Bushy Park. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 09.15-09.45hrs recorded – Mute Swan (<1), Coot (<3), Mallard (26), Tufted Duck (<3), Little Grebe (<4), Moorhen (<17) and Grey Heron (<1).

12.00hrs-15.30hrs — At area 1 Brent Geese (<13) were noted flying northwest over the north end at 13.10hrs and four flew east at 15.05hrs (height both sightings was 20m). At area 4 Black-headed Gull (<3) and Common Gull (<1) were noted foraging intermittently during the afternoon. At area 2 peak counts for foraging Gull species were at 13.35hrs with Black-headed Gull (<64) and Common Gull (<11) at 14.25hrs, at other times averaging 30-40 Black-headed Gulls. At area 3 Black-headed Gulls (<27), Mediterranean Gull (<2) and Herring Gull (<4) were noted at 13.50hrs. Redwing (<25) noted feeding across area 3 and 2 during the afternoon.

At the VEC FC Brent Geese (<30) were noted foraging from 13.50hrs-15.20hrs.

A waterbird survey of the Lakelands from 14.30-14.50hrs recorded – Mute Swan (<1), Coot (<3), Mallard (19), Tufted Duck (<3), Little Grebe (<4), Moorhen (<19) and Grey Heron (<1).

No Brent Goose scat recorded on any of the playing fields.

d) January 6th, 2024

Sunrise- 08.39hrs/Sunset 16.23hrs. Weather – Wind West F3, Cloud 1/8, Dry, 3c, Good visibility. On-site 08.45hrs – 14.45hrs

Species recorded – Mallard, Little Grebe, Little Egret, Grey Heron, Moorhen, Coot, Oystercatcher, Black-headed Gull, Common Gull, Herring Gull, Feral Pigeon, Woodpigeon, Dunnock, Robin, Mistle Thrush, Fieldfare, Blackbird, Wren, Coal Tit, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin, Bullfinch.

<u>08.45hrs-12.00hrs</u> – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 10.00hrs with Black-headed Gull (<65) and Common Gull (<3) noted foraging in the area, averaging 50 Black-headed Gull feeding in the area at other times. At area 1 no foraging species were noted during morning, small numbers of Black-headed Gull (<5) and Herring Gull (<3) noted passing over the site. In area 4 Black-headed Gull (<2), Common Gull (<1) and a Fieldfare were noted foraging during the morning. At Area 2 a peak morning count of Black-headed Gull (<43), Herring Gull (<1) and Common Gull (<1) were noted roosting and foraging at 09.27hrs. A pair Oystercatcher flew southwest over the Lakelands at 09.07hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat. No Brent noted in the VEC FC.

A waterbird survey of the Lakelands from 09.15-09.45hrs recorded – Mallard (<14), Little Grebe (<4), Moorhen (<20), Coot (<1), Little Egret (<1) and Grey Heron (<1).

<u>12.00hrs-14.45hrs</u> — No target species noted at area 1 during afternoon, with occasional flyover Black-headed and Herring Gulls only. No species were recorded foraging in area 4. At area 2 a peak of Black-headed Gull (<50), Herring Gull (<1) and Common Gull (<7) were noted at 12.25hrs. At area 3 Gull numbers peaked at 12.30hrs with Black-headed Gull (<14), Herring Gull (<1) and Common Gull (<1) present.

A waterbird survey of the Lakelands from 13.15-13.45hrs recorded – Mallard (<9), Little Grebe (<4), Moorhen (<17), Coot (<1) and Grey Heron (<1).

No sightings of target species in VEC FC (5) or Bushy Park.

e) January 26th, 2024

Sunrise- 08.19hrs/Sunset 16.55hrs. Weather – Wind Southwest F2, Cloud 2/8, Dry, 4c, Excellent visibility. Onsite 10.30hrs – 16.30hrs.

Species recorded –Brent Goose (off-site), Mute Swan, Mallard, Tufted Duck, Little Grebe, Grey Heron, Moorhen, Coot, Black-headed Gull, Common Gull, Mediterranean Gull, Herring Gull, Woodpigeon, Collared Dove, Pied Wagtail, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Redwing, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin, Bullfinch.

10.30hrs-12.00hrs – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 11.42hrs with Black-headed Gull (<28), Herring Gull (<3) and Mediterranean Gull (<3) noted foraging in the area. At area 1 no foraging species were noted during morning, Redwing (<5), Goldfinch (<8) and occasional Black-headed and Herring Gull noted passing over only. Black-headed Gull (<6) and Common Gull (<3) were noted foraging in area 4 intermittently during the morning. At Area 2 a peak morning count of Black-headed Gull (<25), Herring Gull (<17) and Common Gull (<5) were noted roosting and foraging at 11.15hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat. No Brent Geese were noted at VEC FC or Bushy Park.

A waterbird survey of the Lakelands from 11.15-11.45hrs recorded – Mute Swan (<1), Coot (<4), Mallard (<20), Tufted Duck (<2), Little Grebe (<3), Moorhen (<14) and Grey Heron (<2).

12.00hrs-16.30hrs — No target species noted at area 1 during afternoon, with occasional flyover Black-headed and Herring Gull noted passing over only (<10 each in total). No species were recorded foraging in area 4. At area 2 Gulls were noted foraging and roosting throughout the afternoon with a peak of Black-headed Gull (<61), Herring Gull (<10), Common Gull (<6) and Mediterranean Gull (<4) noted at 14.00hrs. At area 3 a peak count of Black-headed Gull (<15) and Common Gull (<6) was made at 12.55hrs. At the VEC FC Brent Geese (<76) were noted foraging from 13.05hrs to 15.15hrs.

A waterbird survey of the Lakelands from 14.45-15.15hrs recorded – Mute Swan (<1), Coot (<4), Mallard (<28), Tufted Duck (<2), Little Grebe (<3) and Moorhen (<15).

Mistle Thrush (<4), Redwing (<20) and Pied Wagtail (<3) were recorded foraging on the playing fields (2).

No Brent Goose scat recorded on any of the playing fields.

f) February 7th, 2024

Sunrise- 07.59hrs/Sunset 17.19hrs. Weather – Wind Northwest F1, Cloud 4/8, Dry, 2c, Excellent visibility. Onsite 08.15hrs – 14.30hrs.

Species recorded —Brent Goose (flyover & offsite only), Mute Swan, Mallard, Tufted Duck, Little Grebe, Little Egret, Grey Heron, Moorhen, Coot, Black-headed Gull, Mediterranean Gull, Common Gull, Herring Gull, Lesser black-backed Gull, Woodpigeon, Pied Wagtail, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Redwing, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Treecreeper, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin.

<u>**08.15hrs-12.00hrs**</u> – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 10.32hrs with Black-headed Gull (<56), Mediterranean Gull (<1), Herring Gull (<8) and Common Gull (<11) noted foraging and roosting in the area. At area 1 no foraging species were noted, a flock of Brent Geese (<45) flew northwest over the north end at 10.10hrs. Black-headed Gull (<5) and Common Gull (<2) were noted foraging in area 4 during the morning. At Area 2 a peak morning count of Black-headed Gull (<48), Herring Gull (<11), Lesser black-backed Gull (<1), Common Gull (<13) and Mediterranean Gull (<3) were noted roosting and foraging at 11.35hrs. At the VEC FC a foraging flock of Brent Geese (<34) were noted at 09.50hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 10.30-11.55hrs recorded – Mute Swan (<2), Coot (<5), Mallard (<21), Tufted Duck (<6), Little Grebe (<3), Moorhen (<18), Little Egret (<1) and Grey Heron (<2).

<u>12.00hrs-14.30hrs</u> – At area 1 Brent Geese (<4) flew east over the north end at 13.35hrs (height 20m). No species were recorded foraging in area 4. At area 2 Gulls were noted foraging and roosting throughout the afternoon with a peak of Black-headed Gull (<35), Herring Gull (<15) and Common Gull (<6) noted at 12.20hrs. At area 3 small numbers of Black-headed Gull (<15) were noted foraging the afternoon. At VEC FC grounds a flock of Brent Geese (<46) were noted foraging at 14.05hrs.

A waterbird survey of the Lakelands from 13.00-13.25hrs recorded – Mute Swan (<2), Coot (<5), Mallard (<23), Tufted Duck (<6), Little Grebe (<4), Moorhen (<15) and Grey Heron (<1).

Pied Wagtail (<1), Mistle Thrush (<4) and Redwing (<15) were recorded foraging on the playing fields, in areas 2 and 3.

g) February 23rd, 2024

Sunrise- 07.27hrs/Sunset 17.50hrs. Weather – Wind West F2, Cloud 5/8, Dry, 5c, Excellent visibility. On-site 11.00hrs – 17.00hrs.

Species recorded – Brent Goose (flyover & offsite), Mute Swan, Mallard, Tufted Duck, Little Grebe, Grey Heron, Sparrowhawk, Moorhen, Coot, Black-headed Gull, Common Gull, Herring Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Treecreeper, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Greenfinch, Goldfinch.

11.00hrs-12.00hrs – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 11.05hrs with Black-headed Gull (<39), Herring Gull (<2) and Common Gull (<1) noted foraging in the area. At area 1 Starling (<35), Goldfinch (<12) and Woodpigeon (<4) noted foraging only. At Area 4 no foraging species were recorded. At area 2 a peak morning count of Black-headed Gull (<32), Herring Gull (6) and Common Gull (<5) were noted roosting and foraging at 11.45hrs. Sparrowhawk noted soaring over the east end of the Lakelands at 11.39hrs.

12.00hrs-17.00hrs At area 1 a flock of Brent Geese (<30) passed east over the middle of the site at 13.05hrs (height 20m). Common Gull (<1) and Black-headed Gull (<4) noted foraging in area 4 intermittently during the afternoon. At area 2 a peak of Black-headed Gull (<36), Herring Gull (<14) and Common Gull (<9) were noted at 14.35hrs. At area 3 Black-headed Gull (<29), Common Gull (<5) and Herring Gull (<3) foraging at 13.10hrs was the peak count of foraging Gulls in this area. At the VEC FC Brent Geese (<180) were noted foraging from 13.07hrs until 14.40hrs.

A waterbird survey of the Lakelands from 13.30-14.00hrs recorded – Mute Swan (<1), Coot (<3), Mallard (<17), Tufted Duck (<4), Little Grebe (<2), Moorhen (<11) and Grey Heron (<2).

No Brent Goose scat recorded on the any of the playing fields.

h) March 8th, 2024

Sunrise- 06.55hrs/Sunset 18.17hrs. Weather – Wind East F2, Cloud 7/8, Dry, 7c, Excellent visibility. On-site 07.30hrs – 14.30hrs.

Species recorded – Brent Goose (Off-site), Mallard, Little Grebe, Grey Heron, Moorhen, Coot, Black-headed Gull, Mediterranean Gull, Common Gull, Herring Gull, Feral Pigeon, Woodpigeon, Kingfisher, Pied Wagtail, Dunnock, Robin, Mistle Thrush, Redwing, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Treecreeper, Magpie, Jackdaw, Hooded Crow, Starling, Chaffinch, Goldfinch, Greenfinch, Bullfinch.

<u>07.30hrs-12.00hrs</u> – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 09.12hrs with Black-headed Gull (<95) ,Common Gull (<9) and Mediterranean Gull (<1) noted foraging in the area. At area's 1 & 4 no foraging species were noted. At Area 2 a peak morning count of Black-headed Gull (<36), Mediterranean Gull (<1), Herring Gull (2) and Common Gull (<68) were noted roosting and foraging at 09.20hrs. At the VEC FC Brent Geese (<23) briefly landed into the site from 08.53-09.00hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 09.35-09.55hrs recorded – Mallard (<10), Little Grebe (<2), Moorhen (<13), Coot (<1), Kingfisher (<1 at west end) and Grey Heron (<1).

12.00hrs-14.30hrs — Jackdaw (<28) were the only species recorded foraging in field area at area 1. Black-headed Gull (<5) noted foraging in area 4 intermittently during the afternoon. At area 2 no foraging species were recorded as fields were in use throughout. At area 3 Black-headed Gull (<66) and Common gull (<5) foraging at 12.20hrs was the peak count of foraging birds in this area.

A waterbird survey of the Lakelands from 13.30-13.55hrs recorded – Mallard (<12), Little Grebe (<2), Moorhen (<11), Coot (<1) and Grey Heron (<1).

No Brent Geese noted on checks on VEC FC or Bushy Park.

i) March 22nd, 2024

Sunrise- 06.22hrs/Sunset 18.43hrs. Weather – Wind West F4, Cloud 7/8, Dry, 10c, Excellent visibility. On-site 10.45hrs – 16.45hrs.

Species recorded –Mallard, Little Grebe, Grey Heron, Moorhen, Coot, Herring Gull, Lesser black-backed Gull, Feral Pigeon, Woodpigeon, Robin, Mistle Thrush, Blackbird, Blackcap, Chiffchaff, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Treecreeper, Magpie, Jackdaw, Hooded Crow, Chaffinch, Goldfinch, Greenfinch, Siskin, Bullfinch.

<u>10.45hrs-12.00hrs</u> – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 no foraging were noted. At area 1 no foraging species were noted, Herring Gull (<3) noted passing over the site only. No species were noted foraging in area 4 or 2 during the morning (all pitches in use by school). Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat. No Brent noted in VEC FC or Bushy Park.

A waterbird survey of the Lakelands from 11.15-11.40hrs recorded – Mallard (<8), Little Grebe (<2), Moorhen (<10), Coot (<1) and Grey Heron (<1). One Chiffchaff in song at the east end (migrant).

<u>12.00hrs-16.45hrs</u> — No species recorded foraging in field area at area 1. Gull species Black-headed Gull and Common Gull not recorded on-site appearing to have now departed the area for breeding grounds, Herring Gull (<10) noted perched on the school buildings only. Lesser-black-backed Gull (<2) noted intermittently at the Lakelands during the afternoon, no birds noted foraging at area 4, 2 or 3. No Brent recorded at the VEC FC or Bushy Park sites.

A waterbird survey of the Lakelands from 13.15-13.40hrs recorded – Mallard (<9), Little Grebe (<2 Displaying), Moorhen (<9), Coot (<1) and Grey Heron (<1). One Blackcap in song at the east end of the woodland(migrant).

No Brent Goose scat recorded on the any of the playing fields.

2. Comments and observations on survey results

In total 47 bird species were recorded over 9 surveys at the survey site area at Terenure College, Dublin, during the winter bird surveys in 2023-2024, Redwing is a red-listed species of conservation concern (per Birdwatch Ireland's species of conservation concern 2020-2026) and was recorded on-site, (averaging 15-25) foraging in the wider survey area. Species amber-listed as wintering species of conservation concern were Mute Swan, Tufted Duck, Mallard, Coot, Black-headed Gull, Common Gull, Lesser black-backed Gull and Herring Gull. Brent Geese were recorded foraging in the VEC Football Grounds adjacent to Terenure College on seven survey dates (29 on 30/11/23, 120 on 08/12/23, 30 on 19/12/23, 76 on 26/01/24, 46 on 07/02/24, 120 on 23/02/24 and 23 on 08/08/24), none were observed in Bushy Park. Similar again to the recording season 2022-2023 Brent Geese were not observed foraging in the Terenure College survey area, and no geese scat was found on-site, from experience surveying other sites it would appear between the high volume of public footfall on the site, combined with the very regular recreational use of the pitches, negates the visitation of Geese to the site. During surveys birds were noted passing over the site (all over the primary survey site -area 1, these birds are likely moving between outlying sites, including VEC FC).

Results suggest that the site is not an important ex-situ foraging or roosting site for species of qualifying interest from nearby Special protection areas (SPA's).					

Appendix II Winter Bird Surveys 2022-2023

Terenure College, Dublin, Winter Bird Surveys 2022-2023

1) Introduction

Between November 2022 and March 2023 10 Winter Bird Surveys were undertaken at grounds at Terenure College, South County Dublin by Hugh Delaney, a freelance Ecologist (Birds primarily) Hugh has extensive experience surveying numerous sites with ecological consultancies over 12+ years. Hugh is local to the Dun Laoghaire-Rathdown area in Dublin and is especially familiar with the bird life and its ecology in its environs and elsewhere in the country going back over 35 years.

2) Winter Bird Survey Methodology

Winter bird surveys are conducted from soon after sunrise until late in the afternoon, or alternatively started later in the day until sunset, a survey period is a minimum of six hours, the site is monitored throughout the survey period and all bird species utilizing the site recorded, including species flying through site area overhead. Checks are also made on suitable habitat nearby or adjacent to the site for comparative purposes and to monitor any interchange of birds between sites. Target species (species of more special interest) utilizing the site are mapped and estimates of the time these species frequented the site are recorded.



Fig. 1. Terenure College Bird Survey area (encircled in red), the site was divided into the following areas for the purposes of the surveys –

(1. Primary survey site.2. Main playing fields area.3. Secondary playing fields area.4. Terenure College Rugby grounds.5. VEC Football Club grounds.6. Lakelands area (encircled in blue)).

3) Site Description

The site is a parkland-type area situated in suburban south Dublin, at the east side of the site Terenure College and grounds are located and adjacent to this are large areas of playing fields bordered at the boundaries by large trees. A significant feature of the site is the 'Lakelands' area which features a slow-moving water body that moves from west to east via an underground channel arising from the west side that exists the site via a channel underground at the east side passing through the north side of the site, it is bordered also by large trees (notably mainly Holm Oak on the north side) and contains some tree covered islets. The survey site itself (1) at the northwest corner of the survey area of Terenure College is part of the playing field areas and is bordered by trees at its outer boundaries. Dividing the survey site area and Terenure Rugby Club to the east is an artificial pitch area.

Significant adjacent sites of interest to the survey area are VEC Football club immediately to the east and Bushy Park to the south of the survey area.

4) Specific site survey methodology

The site and areas within were comprehensively surveyed during the surveys, twice monthly with an early visit and a later visit made alternately, all areas including the survey site (1) were checked at least hourly during the survey periods, by way of a cyclical check around the site on foot and bicycle (also large portion of site area is viewable simultaneously at the west side of Lakelands). In addition, several dedicated specific counts of the Lakelands area were completed during surveys in order to document the waterbird species numbers present in this area. Outlying sites adjacent to the survey area were also checked during surveys, these specifically being VEC football grounds to the east and Bushy Park to the south. The survey area playing field areas were checked on all surveys specifically for evidence of Brent Goose scat, these being an excellent indicator of any visitations on-site by the species.

5) Survey Results

a) November 11th, 2022

Sunrise- 07.42hrs/Sunset 16.35hrs. Weather – Wind South F4 decreasing to F2, Cloud 6/8, Dry, 14c, Excellent visibility. On-site 10.00hrs – 16.15hrs.

Species recorded – Mallard, Tufted Duck, Little Grebe, Grey Heron, Moorhen, Coot, Black-headed Gull, Common Gull, Herring Gull, Kittiwake, Woodpigeon, Grey Wagtail, Robin, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Greenfinch.

<u>10.00hrs-12.00hrs</u> — Survey commenced at the survey site (1) north of the Terenure College, grass sward length here was estimated at 15+cm in areas and appeared to be no longer being tended (i.e. mown to a playing field standard like the other playing field areas), the other playing field areas were of normal short-cropped playing field standard. The longer grass length here was deemed not be conducive to foraging species such as Brent Geese, Gull species or wader species (only possible exception being perhaps Curlew). No species recorded. At area 2 a peak count of roosting gull species were of Black-headed Gull (<148), Herring Gull (<4), Common Gull (<4) and Kittiwake (<1). At Area 3 Black-headed Gull (<9) were noted roosting. No species present in area 4.

A waterbird survey of the Lakelands from 11.15-11.35hrs recorded – Coot (<2), Mallard (<24), Tufted Duck (<6), Little Grebe (<3), Moorhen (<12) and Grey Heron (<2).

<u>12.00hrs-16.15hrs</u> – At 12.20hrs Black-headed Gull (<190), Herring Gull (<39) and Common Gull (<6) were noted roosting on area 2. This was the peak count of roosting gull species recorded during the afternoon with lower numbers recorded thereafter, at 13.40hrs Black-headed Gull (<68), Herring Gull (<4) and Common Gull (<2) recorded at area 2, at area 3 Black-headed Gulls roosting peaked at 14 at 13.30hrs, with 4 recorded at area 4 at 14.05hrs. No species noted foraging at area 1.

A waterbird survey of the Lakelands from 13.30-13.50hrs recorded – Coot (<3), Mallard (<32), Tufted Duck (<6), Little Grebe (<3), Moorhen (<13), and Grey Heron (<1).

Passerine species recorded around the site were typical of a suburban Dublin parkland, Mistle Thrush (<4) recorded foraging on the playing fields, Grey Wagtail (<1) at the Lakelands, the woodland around the lakelands was the most productive area for passerine species, four Tit species, Goldcrest (<3), Goldfinch (<10), Chaffinch (<8) present in this area.

No Brent Goose scat was recorded on the any of the playing fields.

b) November 21st, 2022

Sunrise- 08.00hrs/Sunset 16.20hrs. Weather – Wind Southeast F3 to F2 west later, Cloud 7/8, Light showers, 7c, Good visibility. On-site 08.15hrs – 14.15hrs.

Species recorded – Mallard, Tufted Duck, Little Grebe, Grey Heron, Moorhen, Coot, Black-headed Gull, Common Gull, Herring Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Greenfinch, Siskin.

<u>08.15hrs-12.00hrs</u> – Surveys commenced on arrival at area 3 at entrance, and onwards to area 1, Lakelands, etc. At area 3 a peak count of roosting and foraging gull species were of Black-headed Gull (<45), Herring Gull (<11) and Common Gull (<6) at 11.05hrs, smaller numbers averaging about 20 mainly Black-headed Gull were present here during the morning. At area 1 no foraging species were noted, with occasional flyover Gulls (mainly Herring Gull) noted passing over the site. No species noted foraging in area 4. At Area 3 a peak count of Black-headed Gull (<59), Herring Gull (<11) and Common Gull (<7) were noted roosting and foraging at 11.40hrs. VEC football grounds and Bushy Park were checked several times during the morning and no foraging species were noted on the playing fields at these sites.

A waterbird survey of the Lakelands from 09.15-09.30hrs recorded – Coot (<3), Mallard (<36), Tufted Duck (<6), Little Grebe (<4), Moorhen (<15) and Grey Heron (<2).

12.00hrs-14.15hrs — No target species noted at area 1, several Black-headed Gulls noted occasionally landing into the site briefly only. At area 4 Black-headed Gull (<2) and Common Gul (<3) noted foraging at 12.50hrs. At 13.35hrs Black-headed Gull (<72), Herring Gull (<14) and Common Gull (<9) were noted mainly roosting on area 2.

A waterbird survey of the Lakelands from 12.15-12.40hrs recorded – Coot (<3), Mallard (<28), Tufted Duck (<6), Little Grebe (<4), Moorhen (<12), and Grey Heron (<1).

Again, the habitats surrounding the Lakelands were most productive for passerines with a majority of species recorded here. Mistle Thrush (<6) recorded foraging on the playing fields.

No Brent Goose scat was recorded on the any of the playing fields.

c) December 4th, 2022

Sunrise- 08.21hrs/Sunset 16.08hrs. Weather – Wind East F2, Cloud 8/8, Occasional showers, 5c, Good visibility. On-site 10.00hrs – 16.00hrs.

Species recorded –Brent Goose (off-site only in VEC), Mallard, Tufted Duck, Little Grebe, Grey Heron, Moorhen, Coot, Black-headed Gull, Common Gull, Mediterranean Gull, Herring Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Treecreeper, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin, Linnet.

<u>10.00hrs-12.00hrs</u> — Surveys commenced on arrival at area 3 at entrance, and onwards to area 1, Lakelands, area 4 etc. At area 3 a peak count of roosting and foraging gull species were of Blackheaded Gull (<31), Herring Gull (<17) and Common Gull (<2) at 11.42hrs, smaller numbers averaging about 15 mainly Black-headed Gull foraging at other times. At area 1 no foraging species were noted during morning. Black-headed Gull (<4) noted foraging in area 4 during morning. At Area 3 a peak morning count of Black-headed Gull (<28), Mediterranean Gull (<2), Herring Gull (<14) and Common Gull (<8) were noted roosting and foraging at 10.50hrs. AT 11.45hrs 27 Brent Geese were noted foraging in the grounds of the VEC Football grounds (viewed over wall from Greenlea Grove).

A waterbird survey of the Lakelands from 10.25-10.40hrs recorded – Coot (<5), Mallard (<41), Tufted Duck (<5), Little Grebe (<4), Moorhen (<18) and Grey Heron (<1).

<u>12.00hrs-16.00hrs</u> – The Brent Geese flock (<27) noted in the VEC were still noted present at 13.10hrs, not observed after this time, none observed on-site or flying over the survey area. No target species noted at area 1, occasional flyover Black-headed and Herring Gull noted passing over only. No species noted foraging in area 4 during the afternoon. At area 3 Gulls were noted foraging and roosting throughout the afternoon with peaks of Black-headed Gull (<77 at 13.12hrs), Herring Gull (<14 at 13.56) and Common Gull (<16 at 14.34hrs). No Brent geese scat located on check of playing fields.

A waterbird survey of the Lakelands from 14.00-14.25hrs recorded – Coot (<5), Mallard (<35), Tufted Duck (<5), Little Grebe (<4) and Moorhen (<16).

Redwing (<12), Mistle Thrush (<6) and Pied Wagtail (<3) were recorded foraging on the playing fields.

No Brent Goose scat recorded on the any of the playing fields.

d) December 30th, 2022

Sunrise- 08.40hrs/Sunset 16.14hrs. Weather – Wind South F2 veering southwest, Cloud 6/8, Dry, 8c, Excellent visibility. On-site 08.15hrs – 14.15hrs.

Species recorded –Mute Swan, Mallard, Tufted Duck, Little Grebe, Grey Heron, Sparrowhawk, Moorhen, Coot, Black-headed Gull, Common Gull, Mediterranean Gull, Herring Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Greenfinch, Siskin.

<u>08.15hrs-12.00hrs</u> — Surveys commenced on arrival at area 3 at entrance, and onwards to area 1, Lakelands, area 4 etc. Area 3 foraging gull numbers peaked at Black-headed Gull (<24) and Herring Gull (<4) at 08.25hrs. At area 1 no foraging species were noted during morning, a Sparrowhawk passed north over area 1 at 11.45hrs. Black-headed Gull (<2) were noted foraging in area 4 during morning. At Area 2 a peak morning count of Black-headed Gull (<66), Mediterranean Gull (<4), Herring Gull (<9) and Common Gull (<16) were noted roosting and foraging at 10.35hrs. Checks on VEC FC and Bushy Park returned with no significant foraging species noted. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 09.15-09.45hrs recorded – Mute Swan (<2), Coot (<4), Mallard (<30), Tufted Duck (<7), Little Grebe (<3), Moorhen (<11) and Grey Heron (<2).

<u>12.00hrs-14.15hrs</u> – No target species noted at area 1 during afternoon, occasional flyover Blackheaded and Herring Gull noted passing over only. Common Gull (<3) noted foraging in area 4 from 12.20hrs-14.00hrs in the afternoon. At area 3 Gulls were noted foraging and roosting throughout the afternoon with a peak of Black-headed Gull (<24) and Herring Gull (<6) at 13.34hrs.

A waterbird survey of the Lakelands from 13.30-13.55hrs recorded – Mute Swan (<2), Coot (<4), Mallard (<28), Tufted Duck (<6), Little Grebe (<4) and Moorhen (<19).

Redwing (<8), Mistle Thrush (<4) and Pied Wagtail (<2) were recorded foraging on the playing fields. No sightings of target species in VEC or Bushy Park.

No Brent Goose scat recorded on the any of the playing fields.

e) January 11th, 2023

Sunrise- 08.35hrs/Sunset 16.30hrs. Weather – Wind Southwest F3, Cloud 7/8, Light showers, 6c, Good visibility. On-site 10.00hrs – 16.00hrs.

Species recorded –Mute Swan, Mallard, Tufted Duck, Little Grebe, Grey Heron, Moorhen, Coot, Blackheaded Gull, Common Gull, Mediterranean Gull, Herring Gull, Woodpigeon, Kingfisher, Meadow Pipit, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Greenfinch, Siskin, Bullfinch.

10.00hrs-12.00hrs — On route to survey site Brent Geese (<120) were noted foraging in the VEC Football grounds at 09.50hrs. Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 11.15hrs with Black-headed Gull (<27), Herring Gull (<5) and Common Gull (<3) noted foraging in the area. At area 1 no foraging species were noted during morning, small numbers of Black-headed Gull (<5) noted passing over the site. No species were noted foraging in area 4 during the morning. At Area 2 a peak morning count of Black-headed Gull (<22), Mediterranean Gull (<1), Herring Gull (<7) and Common Gull (<5) were noted roosting and foraging at 10.45hrs. A flock of Brent Geese (<90) were noted to be still foraging in the VEC football grounds at 11.50hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 09.30-09.55hrs recorded – Mute Swan (<2), Coot (<6), Mallard (<26), Tufted Duck (<4), Little Grebe (<4), Moorhen (<19) and Grey Heron (<1).

12.00hrs-16.00hrs — No target species noted at area 1 during afternoon, with occasional flyover Blackheaded, Common and Herring Gull noted passing over only. No species were recorded foraging in area 4. At area 2 Gulls were noted foraging and roosting throughout the afternoon with a peak of Blackheaded Gull (<54), Herring Gull (<13) and Common Gull (<12) noted at 14.10hrs. A flock of Brent Geese (<90) in the VEC FC were last recorded at 14.45hrs. None recorded in the survey area and a check of the playing fields did not find any BG scat.

A waterbird survey of the Lakelands from 14.15-14.25hrs recorded – Mute Swan (<2), Coot (<6), Mallard (<22), Tufted Duck (<4), Little Grebe (<3), Moorhen (<15) and Kingfisher (<1 seen briefly at the east end of the Lakelands).

Redwing (<25), Mistle Thrush (<6) and Pied Wagtail (<2) were recorded foraging on the playing fields. No sightings of target species in VEC or Bushy Park.

No Brent Goose scat recorded on the any of the playing fields.

f) January 23rd, 2023

Sunrise- 08.23hrs/Sunset 16.50hrs. Weather – Wind North F1, Cloud 6/8, Dry, 8c, Excellent visibility. On-site 08.30hrs – 14.30hrs.

Species recorded –Mute Swan, Mallard, Tufted Duck, Little Grebe, Grey Heron, Moorhen, Coot, Blackheaded Gull, Common Gull, Herring Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Redwing, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Greenfinch, Siskin, Bullfinch.

<u>08.30hrs-12.00hrs</u> – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 10.10hrs with Black-headed Gull (<42), Herring Gull (<6) and Common Gull (<11) noted foraging in the area. At area 1 no foraging species were noted during morning, at 11.22hrs a flock of Brent Geese (<20) flew east over the north boundary of area 1 (height 25m), not located on-site or in VEC afterwards, small numbers of Black-headed Gull (<8) and Herring Gull (<10) were noted passing over the site. Black-headed Gull (<4) were noted foraging in area 4 during the morning. At Area 2 a peak morning count of Black-headed Gull (<45), Herring Gull (<13) and Common Gull (<15) were noted roosting and foraging at 09.40hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 09.15-09.45hrs recorded – Mute Swan (<2), Coot (<5), Mallard (<24), Tufted Duck (<6), Little Grebe (<3), Moorhen (<16) and Grey Heron (<3).

12.00hrs-14.30hrs – No target species noted at area 1 during afternoon, with occasional flyover Blackheaded, Common and Herring Gull noted passing over only (<5 each). No species were recorded foraging in area 4. At area 2 Gulls were noted foraging and roosting throughout the afternoon with a peak of Black-headed Gull (<30), Herring Gull (<14) and Common Gull (<6) noted at 12.20hrs. A check of the playing fields did not find any Brent Goose scat.

A waterbird survey of the Lakelands from 14.00-14.25hrs recorded – Mute Swan (<2), Coot (<6), Mallard (<25), Tufted Duck (<6), Little Grebe (<4) and Moorhen (<18).

Mistle Thrush (<6), Redwing (<25) and Pied Wagtail (<2) were recorded foraging on the playing fields. No sightings of target species in VEC or Bushy Park.

No Brent Goose scat recorded on the any of the playing fields.

g) February 5th, 2023

Sunrise- 08.03hrs/Sunset 17.15hrs. Weather – Wind North F2, Cloud 3/8, Dry, 2c, Excellent visibility. On-site 10.30hrs – 16.30hrs.

Species recorded –Brent Goose (flyover only), Mute Swan, Mallard, Tufted Duck, Little Grebe, Little Egret, Grey Heron, Moorhen, Coot, Black-headed Gull, Mediterranean Gull, Common Gull, Herring Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Redwing, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin, Bullfinch.

10.30hrs-12.00hrs — Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 11.42hrs with Black-headed Gull (<31), Mediterranean Gull (<3), Herring Gull (<10) and Common Gull (<5) noted foraging in the area. At area 1 no foraging species were noted, Goldfinch (<8) and Mistle Thrush (<2) foraging in area, small numbers of Black-headed Gull (<5) and Herring Gull (<3) noted passing over the site. Black-headed Gull (<10) were noted foraging in area 4 during the morning. At Area 2 a peak morning count of Black-headed Gull (<18), Herring Gull (<5) and Common Gull (<2) were noted roosting and foraging at 11.00hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 09.25-09.50hrs recorded – Mute Swan (<2), Coot (<7), Mallard (<20), Tufted Duck (<8), Little Grebe (<4), Moorhen (<23), Little Egret (<1) and Grey Heron (<1).

<u>12.00hrs-16.30hrs</u> — A flock of Brent Geese (<15) flew northwest over the north end of area 1 at 12.34hrs (height 30m), no other species were recorded with the exception of flyover Gull species. No species were recorded foraging in area 4. At area 2 Gulls were noted foraging and roosting throughout the afternoon with a peak of Black-headed Gull (<45), Herring Gull (<9) and Common Gull (<16) noted at 13.10hrs. At VEC FC grounds a flock of Brent Geese (<130) were noted foraging from 14.40hrs, the birds were not present at 15.50hrs.

A waterbird survey of the Lakelands from 14.00-14.25hrs recorded – Mute Swan (<2), Coot (<7), Mallard (<31), Tufted Duck (<8), Little Grebe (<4) and Moorhen (<19).

Mistle Thrush (<5) and Redwing (<30) were recorded foraging on the playing fields, in areas 2 and 3.

No Brent Goose scat recorded on the any of the playing fields.

h) February 18th, 2023

Sunrise- 07.37hrs/Sunset 17.41hrs. Weather – Wind Southwest F2, Cloud 6/8, Dry, 8c, Excellent visibility. On-site 08.00hrs – 14.00hrs.

Species recorded –Brent Goose (flyover only), Mute Swan, Mallard, Tufted Duck, Little Grebe, Little Egret, Grey Heron, Moorhen, Coot, Black-headed Gull, Mediterranean Gull, Common Gull, Herring Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Redwing, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin, Bullfinch.

<u>08.00hrs-12.00hrs</u> – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 10.05hrs with Black-headed Gull (<46), Mediterranean Gull (<5), Herring Gull (<7) and Common Gull (<11) noted foraging in the area. At area 1 at flock of Brent Geese (<22) flew west over site at 08.43hrs (height 25m), no foraging species were noted, Goldfinch, small numbers of Black-headed Gull (<4) and Herring Gull (<8) also noted passing over the site. Common Gull (<3) were noted foraging in area 4 intermittently during the morning.

At Area 2 a peak morning count of Black-headed Gull (<56), Mediterranean Gull (<2), Herring Gull (14) and Common Gull (<10) were noted roosting and foraging at 09.55hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 09.15-09.45hrs recorded – Mute Swan (<2), Coot (<5), Mallard (<17), Tufted Duck (<6), Little Grebe (<4), Moorhen (<19), Little Egret (<1) and Grey Heron (<2).

<u>12.00hrs-14.00hrs</u> – No species recorded foraging in field area at area 1. Common Gull (<2) and Blackheaded Gull (<1) noted foraging in area 4 at 12.15hrs. At area 2 a peak of Black-headed Gull (<58), Herring Gull (<12) and Common Gull (<18) noted at 13.30hrs. At area 3 Black-headed Gull (<8) and Herring Gull (<9) foraging at 13.45hrs was the peak count of foraging birds in this area.

A waterbird survey of the Lakelands from 14.00-14.25hrs recorded – Mute Swan (<2), Coot (<5), Mallard (<15), Tufted Duck (<6), Little Grebe (<4) and Moorhen (<17).

Mistle Thrush (2) and Redwing (<15) were recorded foraging on the playing fields, mainly in area 2.

No Brent Goose scat recorded on the any of the playing fields.

i) March 1st, 2023

Sunrise- 07.13hrs/Sunset 18.02hrs. Weather – Wind Northeast F2, Cloud 4/8, Dry, 6c, Excellent visibility. On-site 10.30hrs – 16.45hrs.

Species recorded –Mute Swan, Mallard, Tufted Duck, Little Grebe, Little Egret, Grey Heron, Moorhen, Coot, Black-headed Gull, Mediterranean Gull, Common Gull, Herring Gull, Lesser black-backed Gull, Woodpigeon, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin, Bullfinch.

10.30hrs-12.00hrs — Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 10.45hrs with Black-headed Gull (<23), Mediterranean Gull (<1), Herring Gull (<4), Lesser black-backed Gull (<2) and Common Gull (<4) noted foraging in the area. At area 1 no foraging species were noted. Common Gull (<1) and Black-headed Gull (<3) were noted foraging in area 4 during the morning. At Area 2 a peak morning count of Black-headed Gull (<53), Mediterranean Gull (<5), Herring Gull (18) and Common Gull (<10) were noted roosting and foraging at 11.25hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 11.20-11.45hrs recorded – Mute Swan (<2), Coot (<4), Mallard (<15), Tufted Duck (<5), Little Grebe (<3), Moorhen (<16), Little Egret (<1) and Grey Heron (<1).

12.00hrs-16.45hrs – No species recorded foraging in field area at area 1. Black-headed Gull (<5) noted foraging in area 4 intermittently during the afternoon. At area 2 a peak of Black-headed Gull (<62), Herring Gull (<15) and Common Gull (<18) was noted mainly foraging noted at 13.15hrs. At area 3 Black-headed Gull (<16), Common gull (<3) and Herring Gull (<5) foraging at 14.40hrs was the peak count of foraging birds in this area. At the VEC FC a flock of Brent Geese (<55) were noted foraging from 13.05hrs, still present at 15.10hrs.

A waterbird survey of the Lakelands from 14.00-14.25hrs recorded – Mute Swan (<2), Coot (<4), Mallard (<18), Tufted Duck (<5), Little Grebe (<3), Moorhen (<15) and Little Grebe (<1).

Mistle Thrush were recorded foraging on the playing fields.

No Brent Goose scat recorded on the any of the playing fields.

j) March 26th, 2023

Sunrise- 07.13hrs/Sunset 19.48hrs. Weather – Wind Northeast F1, Cloud 3/8, Dry, 7c, Excellent visibility. On-site 07.45hrs – 13.45hrs.

Species recorded –Mallard, Tufted Duck, Little Grebe, Little Egret, Grey Heron, Moorhen, Coot, Blackheaded Gull, Mediterranean Gull, Common Gull, Herring Gull, Lesser black-backed Gull, Woodpigeon, Collared Dove, Grey Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Treecreeper, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Goldfinch, Siskin, Bullfinch.

<u>07.45hrs-12.00hrs</u> – Surveys commenced on arrival at area 3 near entrance, and onwards to area 1, Lakelands, area 4 etc. At Area 3 foraging gull numbers peaked at 09.05hrs with Black-headed Gull (<19) and Herring Gull (<3) noted foraging in the area. At area 1 no foraging species were noted, Herring Gull (<6) noted passing over the site only. No species were noted foraging in area 4 during the morning.

At Area 2 a peak morning count of Black-headed Gull (<32), Herring Gull (,8) and Common Gull (<4) were noted roosting and foraging at 10.15hrs. Checks on pitch areas in survey grounds did not find any evidence of Brent Goose scat.

A waterbird survey of the Lakelands from 09.15-09.45hrs recorded – Coot (<4), Mallard (<14), Tufted Duck (<4), Little Grebe (<4), Moorhen (<14) and Grey Heron (<1).

12.00hrs-13.45hrs – No species recorded foraging in field area at area 1. Black-headed Gull (<2) noted foraging in area 4 intermittently during the afternoon. At area 2 a peak of Black-headed Gull (<24), Herring Gull (<5) and Common Gull (<3) were noted foraging at 12.15hrs. At area 3 Black-headed Gull (<16), Common gull (<3) and Herring Gull (<5) foraging at 14.40hrs was the peak count of foraging birds in this area. At the VEC FC a flock of Brent Geese (<55) were noted foraging from 13.05hrs, still present at 15.10hrs.

A waterbird survey of the Lakelands from 12.45-13.15hrs recorded – Coot (<4), Mallard (<12), Tufted Duck (<4), Little Grebe (<4), Moorhen (<13) and Grey Heron (<2).

Mistle Thrush were recorded foraging on the playing fields. Meadow Pipit (<8) were noted passing north over the site on migration during the survey.

No Brent Goose scat recorded on the any of the playing fields.

6) Comments and observations on survey results

In total 43 bird species were recorded over 10 surveys at the survey site area at Terenure College, Dublin, during the winter bird surveys in 2022-2023, Redwing which is red-listed, as a species listed of conservation concern (per Birdwatch Ireland's species of conservation concern 2020-2026) were recorded in the wider survey area , recorded in small numbers (averaging 20-30) foraging on the site. Species amber-listed as wintering species of conservation concern were Mute Swan, Tufted Duck, Mallard, Coot, Black-headed Gull, Common Gull, Lesser black-backed Gull and Herring Gull. Brent Geese were recorded foraging in the VEC Football Grounds adjacent to Terenure College on three survey dates (27 on 04/12/22, 120 on 11/01/23 and 55 on 01/03/23), the groundman there

Brent Geese were recorded foraging in the VEC Football Grounds adjacent to Terenure College on three survey dates (27 on 04/12/22, 120 on 11/01/23 and 55 on 01/03/23), the groundman there confirmed with me that they are quite regular at the site, the species was not recorded foraging in the grounds of Terenure College on any of the survey dates, with a few flocks noted passing over the north side of the survey area only, likely birds moving between other sites, correspondence with the grounds staff of the college and regular walkers to the site suggests they are not frequenting the site, and checks for Brent Geese scat did not record any.

Results suggest that the site is not an important ex-situ foraging or roosting site for species of qualifying interest from nearby Special protection areas (SPA's).

Appendix III- Winter Bird Surveys February-March 2022

Terenure College Winter Bird Surveys February-March 2022 Terenure College Winter Bird Surveys February-March 2022

Introduction

In February and March 2022, a total of 8 winter bird surveys were conducted at lands at Terenure College, by Hugh Delaney, a freelance ecologist (Birds primarily) with an experienced background in bird surveying on numerous sites with ecological consultancies over 10+ years. Hugh, a lifelong birder, is local to the Dun Laoghaire-Rathdown area in Dublin and is especially familiar with the bird life and its ecology in the environs going back over 30 years.

Winter Bird Survey Methodology

Winter bird surveys are conducted from soon after sunrise until late in the afternoon before sunset, the site is monitored throughout the day and all bird species utilizing the site recorded, including species flying through overhead. Checks are also made on suitable habitat nearby or adjacent the site for comparative purposes and to monitor any interchange of birds between sites. Target species (species of more special interest) utilizing the site will be mapped and estimates of the time these species frequented the site recorded.

Site Location



Fig 1. Site location (outlined in red), outlined in yellow are areas 1 and 2, (playing fields), incorporated into the surveys as significant adjacent habitat within Terenure College.

Site Description

The site comprises a grassland area at the west side bordered by trees and adjacent at the east side an elongated lake area that terminates at a culvert at the eastern end at Lakelands Park. The lake is well-vegetated along its northern edge with trees and other cover.

Specific site survey methodology

Site checked throughout the day with excellent overview vantage point observations of the green at the western side of site made from either end, the lake habitat and areas 1 and 2 checked intermittently throughout the day (averaging at least every 1.5 hours during day).

Survey results

February 13th, 2022

Sunrise- 07.47hrs/Sunset 17.31hrs. Weather – Wind F4 Southeast, Cloud 8/8, Light showers, 3c, Good visibility. On-site 08.30hrs – 16.15hrs.

Species recorded – Black-headed Gull, Herring Gull, Common Gull, Jackdaw, Rook, Hooded Crow, Magpie, Woodpigeon, Feral Pigeon, Siskin, Bullfinch, Chaffinch, Greenfinch, Goldfinch, Blue Tit, Longtailed Tit, Coal Tit, Great Tit, Pied Wagtail, Goldcrest, Mallard, Moorhen, Little Grebe, Coot, Blackbird, Mistle Thrush, Redwing, Robin, Wren, Dunnock, Grey Heron, Kingfisher.

Observations from 08.30hrs - 12.00hrs -

Arriving at the college foraging gulls were noted in areas 1 and 2, Gulls continually foraging in areas 1 and 2 during morning with average numbers of Black-headed Gull (<80), Herring Gull (<10) and Common Gull (<15). On-site at the green area at west side no foraging Gulls or other species were noted with only occasional Black-headed Gull landing briefly into this area during the morning, it was noted that the grass sward here was longer than the playing field areas at 1 and 2 and therefore likely suboptimal for foraging Gulls and other species. A peak count of Black-headed Gull (<155) and Herring Gull (<6) was recorded at areas 1 and 2 at 10.45hrs. At the lake area a survey of species present recorded Mute Swan (<2), Moorhen (<8), Mallard (<11), Little Grebe (<5), Coot (<5) and Grey Heron (<2) at 09.30hrs and remained during the morning. A Kingfisher was recorded at the west end of the lake area at 11.30hrs. Good selection of passerine species around the north side of lake area with foraging finches in alders and other trees, Siskin (<10), Goldfinch (<15), Greenfinch (<2), Bullfinch (<3), Treecreeper (<1), and four Tit species recorded.

Observations from 12.00hrs - 16.15hrs -

Observations on-site recorded minimal activity in the green area at the west side of site, with Blackheaded Gull (<1-3) occasionally noted foraging for small periods in the area. Only other species foraging in the area being corvid species (Several of Jackdaw and Hooded Crow), at the lake area similar numbers of waterbird species remained on-site, small increase in Mallard (<14) noted at 14.15hrs. Most waterbird species concentrated in the central area of lake with patches of cover to skulk in are present and members of the public feeding birds from the shore. At areas 1 and 2 Gull foraging activity remained throughout the afternoon with slightly smaller numbers than in the morning. Peak numbers of Black-headed Gull (<85), Common Gull (<12) and Herring Gull (<10) recorded at 14.25hrs. Waterbird species remained stable in number at the lake and were recorded throughout the afternoon.

February 19th, 2022

Sunrise- 07.35hrs/Sunset 17.43hrs. Weather – Wind F3 South, Cloud 7/8, Light showers, 8c, Good visibility. On-site 08.15hrs – 16.00hrs.

Species recorded – Black-headed Gull, Herring Gull, Common Gull, Jackdaw, Rook, Hooded Crow, Magpie, Woodpigeon, Feral Pigeon, Starling, Siskin, Bullfinch, Redpoll, Chaffinch, Greenfinch, Goldfinch, Blue Tit, Long-tailed Tit, Coal Tit, Great Tit, Pied Wagtail, Goldcrest, Mallard, Tufted Duck, Moorhen, Little Grebe, Coot, Blackbird, Mistle Thrush, Song Thrush, Robin, Wren, Dunnock, Grey Heron, Little Egret, Sparrowhawk.

Observations from 08.15hrs – 12.00hrs –

A survey of the lake area at 08.45hrs recorded Mallard (<15), Tufted Duck (<2), Mute Swan (<2), Little Grebe (<4), Moorhen (<7), Coot (<4), Grey Heron (<1) and Little Egret (<1) and remained throughout the morning. At the green area at the west side of site no foraging species were recorded throughout the morning, a Sparrowhawk was noted passing west at 11.05hrs. At areas 1 and 2 Black-headed Gulls (averaging about 60 birds), Common Gull (averaging 5) and Herring Gull (averaging 10) were recorded, peak count of 92 Black-headed Gull foraging in areas 1 and 2 noted at 11.45hrs.

Observations from 12.00hrs - 16.00hrs -

In areas 1 and 2 Gulls continued to forage in the afternoon, slightly down on the morning numbers, with a peak count of 65 Black-headed Gull recorded at 12.50hrs. Smaller numbers of Common Gull (<6) and Herring Gull (<15) also recorded. On-site at the green area in west Black-headed Gull (<2) were noted foraging from 13.00-13.20hrs. Corvids (Magpie and Hooded Crow) and several Thrushes (Mistle and Song) also noted occasionally foraging on-site, no other species recorded. A survey of the lakes area at 13.30hrs recorded similar numbers of waterbirds with only changes a slight increase in Moorhen (<10) and Grey Heron (<3). No other target species recorded.

February 24th, 2022

Sunrise- 07.24hrs/Sunset 17.53hrs. Weather – Wind F4 West, Cloud 2/8, Dry, 6c, Excellent visibility. On-site 08.30hrs – 16.30hrs.

Species recorded – Black-headed Gull, Herring Gull, Common Gull, Jackdaw, Rook, Raven, Hooded Crow, Magpie, Woodpigeon, Feral Pigeon, Siskin, Chaffinch, Greenfinch, Goldfinch, Blue Tit, Longtailed Tit, Coal Tit, Great Tit, Goldcrest, Mallard, Moorhen, Little Grebe, Coot, Blackbird, Mistle Thrush, Redwing, Treecreeper, Robin, Wren, Dunnock, Grey Heron, Little Egret.

Observations from 08.30hrs - 12.00hrs -

At 08.50hrs the green play areas in college surveyed recorded at area 1 – Black-headed Gull (<42), Herring Gull (<4), at area 2 – Black-headed Gull (<24), Common Gull (<4) and Herring Gull (<3). At green area on-site no foraging gulls or other species were recorded. At the lakes area Mallard (<12), Moorhen (<9), Grey Heron (<1), Coot (<4), Mute Swan (<2) and Little Grebe (<2) were recorded, most birds present in the central area of the lake. Monitoring the green area on-site for the remainder of morning recorded no foraging species, occasional single Black-headed Gulls alighting briefly into the area and a few foraging Mistle Thrush only. Continual Black-headed Gull, Common Gull and Herring Gulls foraging in areas 1 and 2 during morning with peak counts of 113 Black-headed Gull in area 2 at 10.15hrs, 6 Common Gull at 09.40hrs in area 1 and 5 Herring Gull in area 2 at 11.20hrs. Waterbirds species remained in lake area throughout.

Observations from 12.00hrs - 16.30hrs -

On-site at the green area at the west side of site Black-headed Gulls (<2) noted foraging at from 15.05-15.30hrs, no other species noted foraging in this area. Areas 1 and 2 continued to host both foraging and roosting Gulls during the afternoon, with a peak count at 13.00hrs of Black-headed Gull (<130), Common Gull (<10), and Herring Gull (<2) in area 2. Numbers of foraging Gulls decreasing later in afternoon with counts of Black-headed Gull (<58), Herring Gull (<2) and Common Gull (<7) foraging in areas 1 and 2 recorded at 15.00hrs. Small numbers of Redwing (<10) recorded foraging in area 1 at 14.30hrs. At the lake area the waterbird species numbers remained stable during the afternoon with Mallard (<10), Moorhen (<8), Coot (<3), Mute Swan (<2), Grey Heron (<1), Little Egret (<1) and Little Grebe (<3) recorded at 15.15hrs.

February 28th, 2022

Sunrise- 07.15hrs/Sunset 18.00hrs. Weather – Wind F1 North, Cloud 5/8, Dry, 5c, Excellent visibility. On-site 08.15hrs – 16.30hrs.

Species recorded – Black-headed Gull, Herring Gull, Common Gull, Mediterranean Gull, Jackdaw, Rook, Hooded Crow, Magpie, Woodpigeon, Feral Pigeon, Siskin, Redpoll, Chaffinch, Greenfinch, Goldfinch, Blue Tit, Long-tailed Tit, Coal Tit, Great Tit, Goldcrest, Mallard, Tufted Duck, Moorhen, Little Grebe, Coot, Blackbird, Mistle Thrush, Redwing, Treecreeper, Robin, Wren, Dunnock, Starling, Grey Heron, Little Egret.

Observations from 08.15hrs - 12.00hrs -

At the lakes area at 08.45hrs Mallard (<13), Tufted Duck (<1), Moorhen (<6), Coot (<3), Mute Swan (<2), Little Grebe (<4), Grey Heron (<1) and Little Egret (<2) were recorded and remained throughout the morning. At the green area at the west side of the site Black-headed Gull (<3) were recorded foraging from 09.30-09.50hrs and Herring Gull (<1) at 11.10-11.20hrs. No other foraging species recorded in this area. At areas 1 and 2 Gulls were noted foraging throughout the morning with peak counts of Black-headed Gull (<110) in area 1 at 10.40hrs. Smaller numbers of Herring Gull (<10), Common Gull (<15), and Mediterranean Gull (<2) also recorded. Redwing (<5) noted foraging in area 2 at 11.30hrs. Passerine activity on-site most active in cover around the north side of lake with Siskin (<15), Redpoll (<6), four Tit species, Treecreeper (<1), Greenfinch (<3), Goldfinch (<20) all recorded.

Observations from 12.00hrs - 16.30hrs -

Continued observations at the green area on-site at west end recorded Black-headed Gulls foraging at 13.15hrs (<2) and at 14.20hrs (<1). Small numbers (<5) of Hooded Crow, Magpie and Mistle Thrush were the only other species recorded foraging in this area. Waterbird species remained insitu at the lake with only changes being a peak of 9 Moorhen recorded at 13.30hrs, most birds again recorded in the central area. Slightly lower numbers of foraging Gulls recorded in areas 1 and 2 with a peak combined count for both areas at 13.45hrs of Black-headed Gull (<70), Common Gull (<8) and Herring Gull (<4). Numbers at other times foraging in the two areas averaging about 40-50 Black-headed Gull. No other target species recorded.

March 3rd. 2022

Sunrise- 07.08hrs/Sunset 18.06hrs. Weather – Wind F2 West, Cloud 5/8, Dry, 6c, Excellent visibility. On-site 08.15hrs – 16.30hrs.

Species recorded – Black-headed Gull, Herring Gull, Common Gull, Jackdaw, Rook, Raven, Hooded Crow, Magpie, Woodpigeon, Feral Pigeon, Siskin, Redpoll, Bullfinch, Chaffinch, Greenfinch, Goldfinch, Blue Tit, Long-tailed Tit, Coal Tit, Great Tit, Goldcrest, Mallard, Moorhen, Little Grebe, Coot, Blackbird, Song Thrush, Mistle Thrush, Robin, Wren, Pied Wagtail, Dunnock, Grey Heron, Little Egret, Kingfisher.

Observations from 08.15hrs - 12.00hrs -

On-site at the green area at the west side of the site single Herring Gull at 09.15hrs-09.40hrs and Black-headed Gull at 10.00hrs-10.15hrs were the only foraging species recorded. Passerines recorded in trees surrounding green area included Mistle Thrush (<3), Pied Wagtail (<2), Blackbird (<1), Robin (<2) and Dunnock (<2). At the lake area Mute Swan (<2), Mallard (<18), Coot (<5), Little Grebe (<5), Moorhen (<9), Grey Heron (<1) and Little Egret (<1) were recorded. In area 1 and 2 Gull numbers foraging were slightly down on previous counts with a peak at 10.30hrs of Black-headed Gull (<45), Common Gull (<5) and Herring Gull (<8) recorded.

Observations from 12.00hrs - 16.30hrs -

At the lake area the only changes on the morning counts was a peak of 21 Mallard at 14.50hrs and 11 Moorhen at 13.00hrs. A Kingfisher was noted feeding at the west end of the lake area at 14.35hrs and 16.05hrs. At the green area at west end of the site no foraging Gulls were recorded, Mistle Thrush (<2), Magpie (<3), Hooded Crow (<2) and Pied Wagtail (<1) were recorded foraging in this area. Goldcrest (<2), Chaffinch (<5), Siskin (<8), Redpoll (<2), Bullfinch (<4), Goldfinch (<10) and Song

Thrush (<2) were noted foraging or singing in cover around the lakes area. In areas 1 and 2 a peak count of 35 Black-headed Gulls and 2 Herring Gull were noted at 14.45hrs with smaller numbers of Black-headed (<20) noted at other times. Raven (<2) passed south over area 1 at 15.10hrs.

March 12th, 2022

Sunrise- 06.47hrs/Sunset 18.23hrs. Weather – Wind F2 Southwest, Cloud 4/8, Dry, 7c, Excellent visibility. On-site 08.00hrs – 16.00hrs.

Species recorded – Black-headed Gull, Herring Gull, Common Gull, Lesser black-backed Gull, Jackdaw, Rook, Hooded Crow, Magpie, Woodpigeon, Feral Pigeon, Siskin, Redpoll, Chaffinch, Greenfinch, Goldfinch, Blue Tit, Long-tailed Tit, Coal Tit, Great Tit, Goldcrest, Mallard, Moorhen, Little Grebe, Coot, Blackbird, Song Thrush, Mistle Thrush, Starling, Robin, Wren, Pied Wagtail, Grey Wagtail, Dunnock, Grey Heron.

Observations from 08.00hrs – 12.00hrs –

On-site at the west side at the green area no foraging Gulls were recorded with small numbers of Lesser black-backed Gulls (<5) noted moving north over the site during the morning. Corvids (Magpie and Hooded Crow), Mistle Thrush (<2) and Pied Wagtail (<1) noted occasionally foraging on-site. At the lakes area Mallard (<15), Mute Swan (<2), Coot (<4), Moorhen (<10), Little Grebe (<5) and Grey Heron (<1) were recorded at 08.45hrs and noted throughout the morning. Peak count of Blackheaded Gull (<35) noted in areas 1 and 2 at 09.40hrs, with small numbers of Common Gull (<5) and Herring Gull (<10) occasionally noted foraging in the same areas during the morning.

Observations from 12.00hrs - 16.00hrs -

At the lakes area the waterbird species and numbers close to those in the morning with only changes noted being Mallard increasing to 18 birds at 15.20hrs and 2 Grey Heron noted at 13.45hrs. Similar range of passerines noted around the lake area as recorded previously with counts of Siskin (<6), Redpoll (<4), Chaffinch (<6), Goldfinch (<12), Robin (<4), Goldcrest (<3), Blackbird (<8) and Grey Wagtail (<1). No foraging Gulls noted foraging at the green area at the west side of the site. At areas 1 and 2 Black-headed Gulls peaked at 30 birds foraging at 15.15hrs. Occasional Herring Gull (<5) also noted foraging in areas 1 and 2, no other target species recorded.

March 19th, 2022

Sunrise- 06.30hrs/Sunset 18.36hrs. Weather – Wind F3 Southeast, Cloud 3/8, Dry, 6c, Excellent visibility. On-site 07.45hrs – 16.00hrs.

Species recorded – Black-headed Gull, Herring Gull, Lesser black-backed Gull, Jackdaw, Rook, Hooded Crow, Magpie, Woodpigeon, Feral Pigeon, Collared Dove, Chaffinch, Greenfinch, Goldfinch, Blue Tit, Long-tailed Tit, Coal Tit, Great Tit, Goldcrest, Mallard, Moorhen, Little Grebe, Coot, Blackbird, Song Thrush, Mistle Thrush, Starling, Robin, Wren, Pied Wagtail, Dunnock, Grey Heron, Sparrowhawk.

Observations from 07.45hrs - 12.00hrs -

At 08.15hrs at the lakes Mallard (<10), Coot (<5), Little Grebe (<5), Moorhen (<12), Mute Swan (<2) and Grey Heron (<2) were recorded. At the green area on-site at west side no foraging Gulls were recorded with Corvids (Hooded Crow and Magpie) recorded, a pair of Mistle Thrush were noted nest building in a tree at the west side of the area. A Sparrowhawk was noted soaring over the site at 09.20hrs. At areas 1 and 2 foraging Gull numbers had depleted on previous counts (Birds having moved off to breeding areas) with a peak count of 20 Black-headed Gull and 5 Herring Gull at 11.15hrs. Two Lesser black-backed Gull were seen briefly foraging in area 1 at 10.25hrs.

Observations from 12.00hrs - 16.00hrs -

Waterbird numbers at the lake area remained similar to the morning with an increase in Mallard to 15 at 14.30hrs noted. At the green area at west side of site a Black-headed Gull was recorded briefly foraging at 13.45hrs, no other target species recorded foraging in this area. In areas 1 and 2 a peak count of Black-headed Gull (<22) and Herring Gull (<7) were recorded at 14.00hrs. A movement of 7 Lesser black-backed Gull were noted passing north.

March 30th, 2022

Sunrise- 07.03hrs/Sunset 19.56hrs. Weather – Wind F2 Northeast, Cloud 5/8, Dry, 6c, Excellent visibility. On-site 08.00hrs – 16.00hrs.

Species recorded – Black-headed Gull, Herring Gull, Lesser black-backed Gull, Jackdaw, Rook, Hooded Crow, Magpie, Woodpigeon, Feral Pigeon, Collared Dove, Chaffinch, Greenfinch, Goldfinch, Blue Tit, Long-tailed Tit, Coal Tit, Great Tit, Goldcrest, Mallard, Tufted Duck, Moorhen, Little Grebe, Coot, Blackbird, Song Thrush, Mistle Thrush, Starling, Robin, Wren, Pied Wagtail, Dunnock, Grey Heron.

Observations from 08.00hrs – 12.00hrs –

At the green area at the west side of the site Corvids (Jackdaw, Hooded Crow and Magpie) and Pied Wagtail (<2) were the only foraging species recorded during the morning. At the lakes Mallard (<10), Tufted Duck (<2), Mute Swan (<2), Moorhen (<8), Little Grebe (<5), Coot (<4) and Grey Heron (<2) were recorded and remained throughout the morning. At areas 1 and 2 Black-headed Gulls peaked at 20 birds recorded foraging at 11.30hrs, small numbers of Herring Gull (<8) also recorded. Lesser black-backed Gull (<11) were noted passing over the site, none recorded foraging.

Observations from 12.00hrs - 16.00hrs -

At areas 1 and 2 small numbers of Black-headed Gull (<15), Herring Gull (<10) and single Lesser black-backed Gull were noted foraging in the afternoon. Waterbird species at the lakes remained similar with Coot observed engaging in courtship behavior. Long-tailed Tit was observed nest building at east end of the lake area. Blackbird was noted nest building in cover at the south side of the green area at west end of the site. No other foraging species apart from corvids and thrushes and Starlings (<20) noted foraging at the west side of the site.

Comments and observations on the survey results

42 bird species were recorded at Terenure College lands during 8 winter bird surveys from February 2022 to March 2022. In the context of wintering bird species that are red listed as species of conservation concern in the revised Birdwatch Ireland List of birds of conservation concern in Ireland (2020-2026) Redwing was recorded in small numbers. Three gull species listed in the amber wintering species category were recorded, these being Black-headed, Herring and Lesser black-backed Gull. Lesser black-backed Gull was noted passing mainly passing through the site and rarely foraging on-site. Results from the surveys suggest that the site is not an ex-situ foraging or roosting site for species of qualifying interest from nearby Special protection areas (SPA's).

Significant numbers of mainly Black-headed Gulls were noted foraging in the college grounds outside the site (in playing field areas 1 and 2), these areas being well maintained and of short sward height, the grassland area within the site was considered suboptimal for foraging Gulls being of a longer length and was only occasionally visited by much smaller numbers of Black-headed Gulls. Gulls ideally prefer a shorter sward height to access food, and this would also apply to some other species like Brent Geese. Liaising with the public accessing the college grounds during surveys and contact with a birder contact living in the area many years I could find no reference to target species (specifically Brent Geese and/or wader species) utilizing the college grounds, and a check online with bird record depositories (for example irishbirding.com) could not unearth any records of these species accessing the site, with the nearest locations being sites closer to the city or the coast to the east.