# Lodgement Cover Sheet - LDG-059481-22

HBP - 315183-29

An Bord Pleanála

### Details

Lodgement Date	24/11/2022
Customer	Raheny 3 Limited Partnership
Lodgement Channel	In Person
Lodgement by Agent	Yes
Agent Name	Brady Shipman Martin
Correspondence Primarily Sent to	Agent
Registered Post Reference	

## Categorisation

Lodgement Type	Appeal
Section	CANAL MAN

## Fee and Payments

Specified Body	No
Oral Hearing	No
Fee Calculation Method	System
Currency	Euro
Fee Value	0.00
Refund Amount	0.00

24/11/2022 15:37 Run at:

Run by: Klaudia Wiezowska

Lodgement ID	LDG-059481-22
Map ID	
Created By	Klaudia Wiezowska
Physical Items included	No
Generate Acknowledgement Letter	
Customer Ref. No.	
PA Reg Ref	

PA Name	Dublin City Council North
Case Type (3rd Level Category)	

Payment Payment Details Record PD-046387-22	Observation/Objection Allowed?	
Related Payment Details Record PD-046387-22	Payment	PMT-046497-22
	Related Payment Details Record	PD-046387-22

Appeals Type

PA Case Details Manual	
PA Case Number	
PA Decision	
PA Decision Date	
Lodgement Deadline	
Development Description	
Development Address	

Run at: 24/11/2022 15:37

Run by: Klaudia Wiezowska



An Bord Pleanala 64 Marlborough St, Rotunda, Dublin 1, D01 V902 LDG- 039431-22
ABP
2 4 NOV 2022
Fee: 6 200.00 Type: Chapte
Time: 15.29 By: Land

Date:

23<sup>rd</sup> November 2022

Re:

Appeal on a Decision by Dublin City Council on a Large Scale Residential Development Application at lands

east of St. Paul's College, Sybil Hill Road, Raheny, Dublin 5

(LRD6002/22/S3-Reference)

Dear Sir/Madam

On behalf of the applicant Raheny 3 Limited Partnership, 7th Floor, O'Connell Bridge House, 27/28 D'Olier Street, Dublin 2, D02 RR99, we hereby lodge a first party appeal against the decision of Dublin City Council to refuse Large Scale Residential Development Planning Permission for development at lands east of St.Paul's College, Sybil Hill Road, Raheny, Dublin 5. This decision was made by Dublin City Council on the 28<sup>th</sup> October 2022. We enclose a cheque for €3,000 as the fee for a first party appeal for a development including commercial development and an EIAR or NIS (Class A4).

The single reason for refusal as set out by Dublin City Council was as follows:

The submitted Natura Impact Statement has not demonstrated that the evidence provided supports the assertion that no impact arises to the Dublin Bay populations of protected Brent geese. Any assessment of the impacts of the proposed development on the site integrity of the Natura 2000 sites in Dublin Bay under the EU Birds and Habitats Directives cannot be made in the absence of data and the precautionary principle applies. It is considered that the proposed development would, therefore, materially contravene Policy GI23 of the Dublin City Development Plan 2016-2022 for the protection of European sites, and hence would be contrary to the proper planning and sustainable development of the area.

For the reasons as set out in the accompanying response document prepared by Enviroguide Consulting it is considered that the reason for refusal has not been supported by any scientific evidence to undermine the NIS as submitted. Any science that is quoted or suggested is either irrelevant (such as the study of Pink-footed Geese on migration Chudinska et al 2016) or outside the scope of any NIS (biological studies of LBBG). In addition, much of the criticism of the NIS in the Parks Report is based on speculation or conjecture on the part of the authors and does not form a sound basis for any scientific assessment. The lack of scientific evidence presented in the Parks Report to undermine the robust scientific evidence presented in the NIS is of great concern because the conclusions of the Parks Report in relation to Light-bellied Brent Geese formed the single reason for refusal of this application.

The NIS, as submitted, was produced to demonstrate that the proposed development will not have significant effects on the integrity of the relevant European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of the relevant European Sites. It has been completed





by competent authors and is based on the best scientific evidence available including six years of survey data and the most recently published population data showing both international and national trends. The NIS has concluded that, ensuring the avoidance and mitigation measures contained therein are implemented as proposed, the Proposed Development will not have any significant effects on the integrity of the relevant European sites, individually or in combination with other plans and projects.

As such the single reason for refusal does not hold up and therefore the development should be permitted by An Bord Pleanala.

As An Bord Pleanala will be aware planning permission has been granted on this site on a number of occasions, most recently in February 2020, only to be overturned at Judicial Review. It is considered that this site is an important site in the provision of high quality residential development in an established and accessible part of Dublin City and as such the proposed development should be permitted by An Bord Pleanala.

We welcome the fact that Dublin City Council Planning Department, notwithstanding the Parks Department Report conclusions, in their assessment of the application, concluded that:

'...the principle of the development within the subject site concluded that the applicant has demonstrated that the proposed development is in compliance with zoning objective under Z15 and the accompanying criteria outlined under Section 14.8.14 of the Dublin City Development Plan 2016-2022. On this basis, there is no significant objection to the delivery of a high density residential development on part of the St. Paul's lands subject to complying with relevant planning standards and demonstration that the proposed development will not have a significant impact on biodiversity.

The Z15 lands of which the subject site is part of will retain existing institutional uses with the potential for expansion and will provide new community uses which includes a nursing home and crèche. While the proposed development will result in a loss of existing area for sports and amenity use, the development will retain in excess of 25% of the site for sports/amenity and will provide a natural extension to St. Anne's Park. The proposed new public open space to the south and east will be taken in charge by DCC ensuring that the lands will have full public access. On balance, it is considered that the retention of lands for sports/amenity use alongside proposed community uses and retention of existing institutional uses within the wider Z15 lands demonstrates compliance with the Z15 zoning objective.

The design and layout alongside the proposed landscape plan for the scheme demonstrates that the **proposed** development will provide a high quality residential scheme with a height, mass and scale which will sit comfortably within its surroundings and shall not have a significant negative impact upon the adjoining Conservation Area or the residential amenity of nearby dwellings.' [Our emphasis]

As such for the reasons set out the proposed development which is in compliance with the Development Plan should be permitted by An Bord Pleanala.

Yours sincerely,

Sorcha Turnbull

Sacha Turnbull

Associate & Senior Planner

Brady Shipman Martin



#### Comhairle Cathrac An Roinn Pleanála & Forbairt Maoine

Bloc 4, Urlár 3, Oifigi na Cathrach, An Ché Adhmaid, Baile Átha Cliath 8. Bhaile Átha Cliath

Dublin City Council Block 4, Floor 3, Civic Offices, Wood Quay, Dublin 8.

t. (01) 222 2288

e. planning@dublincity.ie

28-Oct-2022

Brady Shipman Martin Unit H, Mount Pleasant Business Centre Mount Pleasant Avenue Dublin 6



Application No. Registration Date **Decision Date** Decision Order No Location Proposal

LRD6002/22-S3 06-Sep-2022 28-Oct-2022 P4878

Lands to the east of Saint Paul's College, Sybil Hill Road, Raheny, Dublin 5 The development will consist of: 1. The construction of a residential development set out in 7 no. blocks, ranging in height from 4 to 7 storeys to accommodate 580 no. apartments, residential tenant amenity spaces, a crèche and a 100 bed nursing home. The site will accommodate 520 no. car parking spaces, 1574 no. bicycle parking spaces, storage, services and plant areas. Landscaping will include extensive communal amenity areas, and a significant public open space provision. 2. The 7 no. residential buildings range in height from 4 storeys to 7 storeys accommodating 580 no. apartments comprising 272 no. 1 bed units,15 no. 2 bed units (3-person),233 no. 2 bed units (4-person),60 no. 3 bed units. Balconies and terraces to be provided on all elevations at all levels for each block. The breakdown of residential accommodation is as follows: Block A is a 5 storey building, accommodating 61 no. units; Block B is a 5 storey building, accommodating 70 no. units; Block C is a 5-7 storey building, accommodating 112 no. units; Block D is a 4-5 storey building, accommodating 136 no. units; Block E is a 4-7 storey building, accommodating 96 no. units; Block F is a 5 storey building, accommodating 36 no. units; Block G is a 5 storey building, accommodating 69 no. units; Residential tenant amenity space is provided at ground level of Block C,D,E,F & G (c.961 sq.m). External residential open space between and adjacent all blocks. A crèche is provided in Block G with a total floor area of c.750 sq.m and external play spaces totalling c.583 sq.m. 3. A proposed 100 bed nursing home with ancillary amenity and service areas and staff facilities located to the south of the site, as part of Block G. The proposed nursing home consists of a 4 storey building arranged around a courtyard garden which also forms part of the wider Block G. 4. Blocks C & D and F & G are located above a proposed basement and central podium containing parking areas, plant areas, waste storage. The car-parking breakdown is as follows:

Residential: 471 spaces across basement, podium and surface; Nursing Home: 41 across podium and surface; and Crèche- 8 all at surface level. A total of 1574 cycle parking spaces are provided at basement, podium and

Cean is rui Cirogrina Catrimon. Ni Chá Achmaid, Bhaile Atha Grath & Éire Head Office, Chao Cffices, Wood Guay, Dublin 8, Ireland



#### Comhairle Cathrac<mark>An Roinn Pleanála & Forbairt Maoine</mark> Bloc 4, Urlár 3, Oifigi na Cathrach, An Ché Adhmaid, Baile Átha Cliath 8.

Dublin City Council Block 4, Floor 3, Civic Offices, Wood Quay, Dublin 8.

t. (01) 222 2288

e. planning@dublincity.ie

throughout the site in both secure parking facilities for residents and staff and at surface level for short term/visitors.5. Total public open space proposed is c.2.09 ha which includes a new c.1.78ha public open space which is provided to the south and east of the site and includes for 6 no. playing pitches of mixed sizes to be taken in charge by Dublin City Council (of a total area of c.1.8ha to be taken in charge). Proposed pedestrian access from the site to the adjacent St Anne's Park is proposed on the southern boundary of the site. 6. Widening and realignment of an existing vehicular access onto Sybil Hill Road to facilitate the construction of an access road with footpaths and on-road cycle tracks from Sybil Hill Road between Sybil Hill House and St Paul's College incorporating new accesses to Sybil Hill House and St Paul's College and the provision of new wall and railing boundary treatment along the new road and new pedestrian/vehicular gates to the new and existing accesses to Sybil Hill House and St Paul's College. To facilitate this new access road it is proposed to demolish an existing pre-fab building. The application also includes for the relocation of an existing pedestrian crossing on Sybil Hill Road. 7. The routing of surface water discharge from the site via St. Anne's Park to the Naniken River and the demolition and reconstruction of existing pedestrian river crossing in St. Anne's Park with integral surface water discharge to Naniken River. 8. The proposed application includes all site landscaping works, green roofs, substations, PV panels, boundary treatments, lighting, servicing, signage, surface water attenuation facilities and associated and ancillary works, including site development works above and below ground. An Environmental Impact Assessment Report and a Natura Impact Statement have been prepared in respect of the proposed development. The planning application may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy, at the offices of Dublin City Council during its public opening hours and a submission or observation in relation to the application may be made to the authority in writing on payment of the prescribed fee within the period of 5 weeks beginning on the date of receipt by the authority of the application. The application may also be inspected online at the following website set up by the applicant www.foxlandslrd2022.ie.

Applicant
Application Type

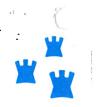
Raheny 3 Limited Partnership Large Residential Development-3

 If you have any queries regarding this Decision, please contact the number or email shown above

#### **IMPORTANT NOTE:**

Please be advised that a compliance submission(s) can only be submitted in pdf format and by e- mail to <a href="mailto:compliances@dublincity.ie">compliances@dublincity.ie</a>

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#### Comhairte Cathrac**An Roinn Pleanála & Forbairt Maoine** Bhaile Átha Cliath Bloc 4, Urlár 3, Oifigi na Cathrach, An Ché Adhmaid, Baile Átha Cliath 8.

Dublin City Council Block 4, Floor 3, Civic Offices, Wood Quay, Dublin 8.

t. (01) 222 2288

e. planning@dublincity.ie

#### NOTIFICATION OF DECISION TO REFUSE PERMISSION

In pursuance of its functions under the Planning & Development Acts 2000 (as amended) Dublin City Council, being the Planning Authority for the City of Dublin has by order dated 28-Oct-2022 decided to REFUSE PERMISSION for the development described above, subject to the following condition(s).

#### CONDITION(S) AND REASON(S) FOR CONDITION(S)

The submitted Natura Impact Statement has not demonstrated that the evidence provided supports the assertion that no impact arises to the Dublin Bay populations of protected Brent geese. Any assessment of the impacts of the proposed development on the site integrity of the Natura 2000 sites in Dublin Bay under the EU Birds and Habitats Directives cannot be made in the absence of data and the precautionary principle applies. It is considered that the proposed development would, therefore, materially contravene Policy GI23 of the Dublin City Development Plan 2016-2022 for the protection of European sites, and hence would be contrary to the proper planning and sustainable development of the area.

The applicant should note that development on foot of this <u>Decision to Grant</u> may not commence before a notification of final grant has been issued by the Planning Authority or An Bord Pleanala following consideration of an appeal.

N.B. It should be clearly understood that the granting of planning permission does not relieve the developer of the responsibility of complying with any requirements under other codes of legislation affecting the proposal and that a person shall not be entitled solely by reason of a planning permission to carry out any development.

- 1. A person shall not be entitled solely by reason of a grant of Planning Permission to carry out any development.
- 2. A grant of Planning Permission does not entitle the applicant to construct a development that would oversail, overhang or otherwise physically impinge upon an adjoining property without the permission of the adjoining property owner.
- 3. Any observations or submissions received by the Planning Authority in relation to this application have been noted.

Note to Applicant:



Comhairle Cathrac<mark>An Roinn Pleanála & Forbairt Maoine</mark> Bloc 4, Urlár 3, Oifigi na Cathrach, An Ché Adhmaid, Baile Átha Cliath 8. Bhaile Átha Cliath

Dublin City Council Block 4, Floor 3, Civic Offices, Wood Quay, Dublin 8.

t. (01) 222 2288

e. planning@dublincity.ie

- The decision of Dublin City Council in respect of this development does not imply or infer any approval or right to connect to or discharge wastewater to the public sewer network or the right to connect to the public water supply. The Applicant shall, prior to the commencement of Development, make all necessary arrangements with and get all necessary approvals from Irish Water in relation to wastewater discharges and water connections.
- Appeals must be received by An Bord Pleanala within FOUR WEEKS beginning on 28-Oct-2022. (N.B. this is not the date on which the decision is sent or received). This is a strict statutory time limit and the Board has no discretion to accept late appeals whether they are sent by post or otherwise. The appeal MUST BE FULLY COMPLETE in all respects - including the appropriate fee - when lodged. It is not permissible to submit any part of it at a later date, even within the time
- Refund of Fees submitted with a Planning Application. Provision is made for a partial refund of fees in the case of certain repeat applications submitted within a period of twelve months, where the full standard fee was paid in respect of the first application, and where both applications relate to developments of the same character or description and to the same site. An application for a refund must be made in writing to the Planning Authority and received by them within a period of 8 weeks beginning on the date of the Planning Authority's decision on the second application.

Signed on behalf of the Dublin City Council:

#### Advisory Note:

Please be advised that the development types shown below can now be submitted via our online service

Domestic Extensions including vehicular access, dormers /Velux windows, solar panels

Residential developments up to & including four residential units (houses only)

Developments for a change of use with a floor area of no more than 200 sq. m

Temporary permission (e.g. accommodation for schools)

Outdoor seating / smoking areas.

Shopfronts / signage



## Appeal Response to Dublin City Council's Refusal of Large-Scale Residential Development at lands to the east of St. Paul's College, Dublin 5.

November 2022





#### 1. Introduction

This appeal response to the decision of Dublin City Council to refuse permission for a Large-Scale Residential Development at lands to the east of St. Paul's College, Raheny, Dublin 5 has been prepared by Enviroguide Consulting. Enviroguide Consulting have been providing environmental consultancy on this site since 2018 including the carrying out of continuous site surveys since 2018 and ongoing, and the preparation of EIAR and NIS for both this and previous applications on the site.

The single reason for refusal as set out by Dublin City Council was as follows:

The submitted Natura Impact Statement has not demonstrated that the evidence provided supports the assertion that no impact arises to the Dublin Bay populations of protected Brent geese. Any assessment of the impacts of the proposed development on the site integrity of the Natura 2000 sites in Dublin Bay under the EU Birds and Habitats Directives cannot be made in the absence of data and the precautionary principle applies. It is considered that the proposed development would, therefore, materially contravene Policy GI23 of the Dublin City Development Plan 2016-2022 for the protection of European sites, and hence would be contrary to the proper planning and sustainable development of the area.

For the reasons set out in this response document the reason for refusal has not been supported by any scientific evidence to challenge the NIS as submitted. Any science that is quoted or suggested is either irrelevant (such as the study of Pink-footed Geese on migration Chudinska et al 2016) or outside the scope of any NIS (biological studies of LBBG). In addition, much of the criticism of the NIS in the DCC Park's report is based on speculation or conjecture on the part of the authors and does not form a sound basis for any scientific assessment. The lack of scientific evidence presented in the Parks Report to undermine the robust scientific evidence presented in the NIS is of great concern because the conclusions of the Parks Report in relation to Light-bellied Brent Geese formed the single reason for refusal of this application.

The NIS, as submitted, was produced to demonstrate that the proposed development will not have significant effects on the integrity of the named European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of these European Sites. It has been completed by competent authors and is based on the best scientific evidence available including six years of survey data and the most recently published population data showing both international and national trends. The NIS has concluded that, ensuring the avoidance and mitigation measures contained therein are implemented as proposed, the Proposed Development will not have any significant effects on the integrity of the relevant European sites, individually or in combination with other plans and projects.

#### 2. General Comments:

The scope of the NIS (Enviroguide 2022) is clearly set out in Section 1.2 of the NIS and is stated as:

'A Natura Impact Statement (NIS) was prepared to inform and assist the competent authority in carrying out its AA as to whether or not the Proposed Development will have significant

effects on the integrity of any European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of the European Sites'.

We would reiterate here that the function of the NIS is "not to prove what the impacts and effects will be, but rather to establish beyond reasonable scientific doubt that adverse effects on site integrity will not result" (Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities (page 23, DoEHLG, 2009).

For that reason, the focus of the NIS (as clearly stated within) is to demonstrate that the proposed development will not have a adverse impact on the integrity of any European Site in view of the Site's Conservation Objectives. It is not or does not purport to be a monograph on Brent Geese.

The authors of the Parks Report are listed as Kieran O'Neill – Senior Executive Landscape Architect, Lorraine Bull Biodiversity Officer, Leslie Moore – Head of Parks/City Parks Superintendent, Consultant Lesley Lewis (Limosa Environmental & Birdwatch Ireland).

We note that Lesley Lewis is listed as an author of the Park's Report. In our experience where an outside consultant is brought in to assist a competent authority in carrying out an review of an Appropriate Assessment, they would prepare their own stand-alone report. Due to the manner in which the Parks Report has been prepared it is not clear if Dr. Lewis prepared her own separate report which was then edited by the Parks Department. Any third-party report should consist of recommendations and conclusions which in turn should be referred to by the Competent Authority in their report. We would ask what sections of the parks report did she write and/or did Parks selectively extract sections from a standalone report? This matter is of fundamental importance because the Parks report in respect of the Light-bellied Brent Geese formed the basis of the sole reason for refusal of the application.

#### 3. Response to Specific Points Raised:

This document addresses the points made within the Parks report under the following headings (as raised in the Parks Report):

- Scientific Evidence
- Trends
- Importance of St. Anne's Park
- Expertise of NIS Project Team
- Analysis of Colour-Ring Data
- Consideration of the effects of disturbance of the geese.
- Assessment/consideration of the zostera food resource.

The experience and expertise of the authors of the NIS is restated within this document for ease of reference.

#### 3.1 Scientific Evidence

The Parks Report states 'The overall NIS lacks scientific evidence to back up the author's conclusions, with little or no scientific reference to existing published knowledge of species

ecology, population ecology/dynamics, distribution, foraging ecology, diet, responses to disturbance etc'.

**Response:** We disagree with this assertion on the basis that the scientific evidence reproduced in the NIS is based on 4 years of Winter Bird Surveys and use of an additional 2 years of Scott Cawley data is the best scientific information available, all of which was used to demonstrate that the Light Bellied Brent Geese have successfully relocated to other ex-situ grassland feeding areas following the loss of the proposed development site. The references to species ecology, population ecology/dynamics, distribution, foraging ecology, diet, responses to disturbance etc (where etc is not defined) are not relevant to the scope of this NIS.

We would question the relevance of a number of the scientific references relied on in the Parks Report to assess the NIS for the proposed development. In particular:

Bearhop, S., Hilton, G.M., Votier, S.C. & Waldron, S. (2004) Stable isotope ratios indicate that body condition in migrating passerines (our emphasis)is influenced by winter habitat. Proceedings of the Royal Society of London, Series B: Biological Sciences, 271, S215–S221.

Comment: Passerines are small songbirds who have a very different biology to geese. Some species migrate short distances and others very long distances. Many are insectivorous while others are vegetarian. They have very different feeding behaviours even among passerine species. There is no basis for comparison between the biology of passerines and geese.

2. Harrison, X. A., Blount, J.D., Inger, R., Norris, D.R. & Bearhop, S. (2011) Carry-over effects as drivers of fitness differences in animals. *Journal of Animal Ecology* 80, 4-18.

Comment: The above referenced paper is a very general paper that discusses carry over effects in mammals and birds and we fail to see the relevance in the context of this NIS. A specific study (Bearhop et al 2008)<sup>1</sup> on carry over effects on Light Bellied Brent Geese is appropriate and actually supports the findings of the NIS that there are no carry over effects in the year (breeding season 2019) after the loss of the site of the proposed development.

3. Holmes, N., Giese, M. & Kriwoken, L. K. (2005) Testing the minimum approach distance guidelines for incubating Royal penguins *Eudyptes schlegeli*. *Biological Conservation*, 126, 339–350

Comment: There is no basis for comparison between nesting Royal Penguins which nest on largely uninhabited Sub-Antarctic islands and wintering Light bellied Brent Geese which winter in or proximal to populated areas.

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<sup>&</sup>lt;sup>1</sup> Inger, R., Gudmumdsson, G.A., Ruxton, G.D., Newton J., Colhoun, K., Auhage, S. & Bearhop, S (2008) habitat utilisation during staging affects body condition on long distance migrant Branta bernicla hrota: potential impacts on fitness? Journal of Animal Ecology 79, 974-82

 Price, M. (2008) The impact of human disturbance on birds: a selective review. (In: Eds: D. Lunney, A. Munn & W. Meikle). Too close for comfort: contentious issues in human-wildlife encounters. Pages 163-196. Royal Zoological Society of New South Wales, Mosman, NSW, Australia.

Comment: The Price (2008) paper concludes that 'Birds tend to overestimate the risk associated with humans rather than underestimate it and risk injury and therefore are more likely to partially habituate to harmless and repetitive human disturbance rather than lose all 'fear' towards humans. As a bird's response dynamically varies with its current assessment of risk and the response is most likely to be context and species-specific, it is difficult to predict with confidence, how birds will react to increased incidences of human disturbance (our emphasis)'.

It is also important to note that the original paper on use of inland feeding sites by Brent Geese (which the NIS has also referenced) is based on <u>one year's</u> survey work. (Benson 2009).

We further disagree with the statement in the Parks Report that 'and waterbird site-specific trends for Dublin Bay have not been referenced (i.e. Kennedy et al. 2022)'. We would refer the Board to the NIS p74 Figure 8 which clearly references Kennedy et al 2022).

#### 3.2 Trends

The Parks Report comments on the trend data contained within the NIS as follows:

Section 7.3 of the NIS (Page 73, Enviroguide Consulting 2022b) examines the national and international population trends of LBBG and goes into good detail on the various trends produced through I-WeBS (Burke et al. 2018b), and from LBBG census data (IBGRG¹) (Burke et al. (2018a)). These latter mentioned trends, as also published in Lewis et al. (2019), show that LBBG have a long- term national trend for increase. The 10-year (2007-2017) and 5-year (2012-2017) trends, however, are for decline (-10.2 and -15.5 respectively), as reported by the NIS. The NIS then goes on to present the updated national waterbird trends (based on I-WeBS data) which were published in early 2022 (Kennedy et al. 2022).

The NIS also reports on more recent flyway population data within an online report by the IBGRG² which presents interim results in advance of official figures from the 2018–2020 LBBG censuses. The estimates of flyway population size and breeding success for 2018–2020 are derived from Strangford Lough counts only (which hosts over 75% of the population during late autumn). These data indicate continued stability over the last three years with five-year running means consistent at a population size between 35,000 and 36,000 individuals. This IBGRG report concludes that the frequency of successful breeding years 'remains a key dynamic to population resilience'. In particular, a successful breeding year in 2019 has helped stabilise a downward trend in productivity.

**Response:** Section 7.3 of the NIS uses the most up to date published data on both National and International trends and the conclusions arrived at in the NIS are on the basis of this published data.

Lewis (2019)<sup>2</sup> confirms that 'The population has shown huge increases in the medium and long-term, although some years of almost zero productivity mean there has been some fluctuation in numbers in the short-term. Numbers reached a peak of over 48,000 birds in winter 2011/12 but had fallen as low as 32,000 birds three years later. In the last three years (autumn 2015-2017) the population has numbered 35,000 - 40,000 birds. In recent years almost total breeding failure was recorded in autumn 2009, 2013 and 2017 (Colhoun et al., 2017); but percentage young exceeded 20% in autumns 2004, 2007 and 2011 (Irish Brent Research Group, pers. comm.), with varying levels of success in between'.

#### The Parks Report then goes on to state that:

Generally, the monitoring of only population trends provides little or no information as to the stage(s) of an animals life cycle at which population change is being affected, so clearly, the monitoring of breeding success (e.g. annual productivity) is important in monitoring the LBBG population. But while primary demographic parameters such as productivity have a marked effect on population size, we have no knowledge of other such important parameters such as over-winter survival of LBBG. For instance, at high population densities (such as might occur when habitat is lost and animals are constrained into restricted areas), even though the animals might still be present, vital demographic rates may change as a result, such as survival, age of successful first breeding, or fecundity – all ultimately affecting population size.

**Response:** In contrast to the stated evidence regarding trends in the NIS and repeated within the Parks Report, in making the above statement that 'at high population densities (such as might occur when habitat is lost and animals are constrained into restricted areas), even though the animals might still be present, vital demographic rates may change as a result, such as survival, age of successful first breeding, or fecundity – all ultimately affecting population size' DCC parks have not produced any scientific evidence to support such a statement.

The Parks Report is, in fact, at variance with Lewis (2019) which states that 'Brent geese are well-known to feed on recreational grasslands from mid-winter onwards (Inger et al., 2006), which means many flocks are unlikely to be recorded during core I-WeBS counts. Recent work as part of a Natura Impact Statement (Scott Cawley, 2017) identified 113 terrestrial inland feeding sites used by Brent geese in Dublin City and its environs from 2012/13 to 2016/17. The **abundance** (our emphasis) of these foraging sites within the Dublin Bay catchment is likely a factor in the increased numbers in Dublin Bay in recent years, despite poor productivity and declines in many other areas'.

The NIS has demonstrated that there is no carry over effects due to the loss of the proposed development site, there is an even distribution of birds throughout the network of ex-situ feeding sites over four survey seasons, and there is no evidence to suggest that the Dublin Bay population of LBBG is not healthy.

The Parks Report continues 'Further to the discussion on trends, the NIS does not mention recently published site level trends for LBBG (Dublin Bay) based on I-WeBS data (up to 2019/20) (Kennedy et al. 2022). These trends, for 5-, 12- and 23-year periods show that long and medium term tends are positive while the short term of the Dublin Bay LBBG population

<sup>&</sup>lt;sup>2</sup> Lewis et al, 2019, Irish Wetland Bird Survey, Waterbird Status and Distribution, 2009/2010 - 2015/2016

is for decline. However, obtaining an accurate trend for the population is difficult. While it could be argued that the trend produced by I-WeBS is reliant on counts obtained on a rising tide when some LBBG may be foraging terrestrially, and thus does not account for all birds, this trend does use data that have been collected in a consistent manner over a long period of time, so is theoretically robust.'

Response: The short-term trend of LBBG is for decline and this is recognized in Section 7.3.2 of the NIS so it is not correct for the Parks Dept. to state that the NIS does not mention recently published data in this regard. While doing so they admit shortcomings in the I-WeBS data due to it being obtained on a rising tide when some LBBG may be resting terrestrially and thus does not account for all birds. While it is not for us to judge the veracity of this data we would submit that monthly counts at ex-situ sites, carried out over 6 seasons by Scott Cawley and Enviroguide Consulting have produced considerably more robust data. For the purpose of the NIS the trends cited in the NIS (7.2.3 and 7.3.3) are the most recently available published National and International Trends and are sufficiently robust to enable the determination that the loss of a single ex-situ site (the site of the Proposed Development) has not and will not have any significant impact on LBBG in view of the Conservation Objective 'Population Trend' which should be stable or increasing.

The Parks Report further states: Another trend can be produced by using roost counts undertaken by the Dublin Bay Birds Project<sup>3</sup>. These roost counts are undertaken annually by a team of counters who count at dawn before the geese leave the roost, with the assumption that none has moved inland by that time (Boland et al. 2021). However, Boland et al. (2021) explain how annual fluctuations in census counts such as the peak of 7,064 recorded in January 2017 compared to the 2020 total of 5,384 are not likely to represent rising and falling population numbers but rather reflect local factors such as weather conditions, tides and food availability. Annual roost counts from the Dublin Bay Birds Project are shown below. The numbers should perhaps be regarded as **stable**, **rather than increasing (our emphasis)** for the aforementioned reasons.

Year	2017	2018	2019	2020	2021	2022
			2.2			

**Response:** We find this paragraph somewhat confusing because they appear to be assessing trends based on counts carried out one day a year. However, we acknowledge that they state that the numbers should perhaps regarded as stable rather than increasing and this supports the conclusion of the NIS that there will be no impact from the Proposed Development in view of the Conservation Objective 'Population Trend'.

The Parks Report goes on to state 'For the reasons discussed above, the current trend of the Dublin Bay LBBG population is difficult to discern with confidence, and particularly in light of how changes in habitat use have affected the population in recent years. So the assumption that a one-off high peak count of over 7,000 birds (NIS Page 73 Enviroguide Consulting 2022b) suggests that there has been no reduction in population size since the loss of the St Paul's site for foraging is overly simplistic, and scientifically incorrect. A large once-off count could occur for a variety of reasons including weather on the survey date or disturbance of the geese

from other sites. From our assessment, it would appear that the population may be stable, but with some doubt, and what pressures the current Dublin Bay population are facing in terms of changing habitat use and foraging success remains unknown.

**Response:** In making the above statement the Parks Department are completely contradicting their own evidence which shows numbers in excess of 7000 birds in the Dublin Bay area for the past two years. They are also invalidating their own data from the Dublin Bay Birds Project which is based on a single count once a winter. Furthermore, they are agreeing with the NIS that 'it would appear that the population may be stable' although they caveat that by saying 'but with some doubt'.

It is clear that they are attempting to undermine the NIS but do not have any data upon which to do so and the actual data says otherwise. This is unsurprising because the NIS is robust in the context for which it was written. The final sentence 'and what pressures the current Dublin Bay population are facing in terms of changing habitat use and foraging success remains unknown' is not relevant to the NIS which was prepared using the best available scientific knowledge. Conjecture as to what factors may impact on the LBBG at some point in the future are neither scientific nor within the scope of the NIS.

The Parks Report states 'The statement regarding population fluctuations (NIS Page 73 Enviroguide Consulting 2022b) is confusing - 'It should be noted that population fluctuations of LBBG...and breeding success are intrinsically linked with factors associated with their summer breeding grounds e.g., competition for resources, predation of chicks and eggs, and availability of food (Madsen, Bregnballe & Mehlum, 1989; Madsen et al. 2019). Therefore concerns regarding the effects of the loss of a single ex-situ site on the global LBBG population are unfounded'. It would appear that the authors of the NIS are discounting the key demographic parameter (overwinter) survival and have not considered the well-researched topic of 'carry-over effects' defined as any event occurring in one season that influences individual performance in a non-lethal manner in a subsequent season, studied in LBG themselves (Bearhop et al. 2004; Norris, 2005; Inger et al. 2010; Harrison et al. 2011). Simply, if an individual survives winter, it must be in good enough condition to migrate long distances to the breeding grounds and then be in sufficient good condition to breed successfully. The wintering stage of the life cycle of a migratory waterbird is therefore extremely important, as is the staging period in the case of LBBG.

Response: The NIS has not discounted overwinter survival, and this is addressed in Section 7.3.1 which is immediately prior to the statement above which they have selectively extracted. They appear to be misunderstanding the information which is that the loss of a single site namely the site of the proposed development, will not have any impact on the breeding success of the species for the reasons stated above as the birds have successfully relocated to other suitable sites within the wintering network. Their statement 'carry-over effects' defined as any event occurring in one season that influences individual performance in a non-lethal manner in a subsequent season, studied in LBG themselves strongly supports the conclusion of the NIS which scientifically demonstrates (by virtue of the number of juvenile birds in the flock) that the LBBG had an extremely successful breeding season in 2019 (see NIS Section 7.3.1 and Table 12) which was the breeding season immediately after the first winter that the site of the proposed development was unavailable to them following a change to the habitat namely the winter of 2018/2019.

The Parks Report states that 'Almost the entire population of LBBG spend winter in Ireland with Dublin Bay the most important site in the Republic (Lewis et al. 2019) supporting some 20% of the ROI total (calculated using a site total of 7,000 geese and an all- Ireland population of 35,150 (from Burke et al. 2018a). Impacts at such an important site as Dublin Bay could therefore have an impact on the flyway (i.e. global) population. 'Carry-over effects' have been researched in the East Canadian high Arctic Light-bellied Brent Goose (Branta bernicla hrota) population previously. Inger et al (2010) showed how winter habitat selection, with extended parental care (as in the case of geese with families) was influenced by parental status. Their study demonstrated that later in the winter, adults with families utilized lower quality resources than non-breeders, probably caused by parents being constrained in habitat choice by the lower foraging efficiency of their offspring. Consequently, parental adults ended the winter in poorer condition than non-breeders. This clearly shows that various factors during the non-breeding season, in addition to factors such as changes in habitat quality or availability, or levels of disturbance can have consequences for the **next breeding season**, (our emphasis) clearly at variance with the opinions of the NIS'.

Response: This paragraph completely contradicts their earlier statement "for the reasons discussed above, the current trend of the Dublin Bay LBBG population is difficult to discern with confidence, and particularly in light of how changes in habitat use have affected the population in recent years. So the assumption that a one-off high peak count of over 7,000 birds (NIS Page 73 Enviroguide Consulting 2022b) suggests that there has been no reduction in population size since the loss of the St Paul's site for foraging is overly simplistic, and scientifically incorrect" and further confirms that the number of LBBG in Dublin Bay cited in the NIS is correct at ca. 7000 birds.

It also supports and confirms the validity the information in Section 7.3.1 Table 12 of the NIS which demonstrates that the breeding season immediately following the 'loss' of the proposed development site was an extremely successful one (based on the number of juvenile birds counted in the flocks) followed by two average ones in 2020 and 2021. Therefore, as demonstrated in the NIS, the loss of the proposed development site has not resulted in any 'carry over' effects.

#### 3.3 Importance of St. Anne's Park

The Parks Report states that 'Section 7.1.1 of the NIS (NIS Page 41 Enviroguide Consulting 2022b) provides a summary of usage of St Anne's Park by LBBG over the years surveyed and compelling evidence of the reduction in use of the development lands and adjacent St Paul's playing pitch since winter 2018/19. The overall peak count of LBBG at the site was 1,530 individuals in 2016/17, equivalent to 22% of the Dublin Bay LBBG population (assuming a population size of 7064 (DBBP roost count 2017 see above) (not noted in the NIS). In this same winter, 76% of the counts made of LBBG over 21 visits recorded numbers of geese that exceeded the international threshold'.

**Response:** This paragraph is a statement of fact, but it is important to note that they have again confirmed a figure of ca 7000 geese and in doing so contradicted themselves from earlier statements regarding the validity of this figure being quoted in the NIS.

The Parks Report claims that 'The importance of this site in the context of the wider network of inland feeding sites has not been assessed in the NIS adequately despite the raw data being available (and presented in appendices). The site importance (i.e. ecological value in terms of EclA<sup>4</sup>) is a key factor in assessing the magnitude of loss of the site during impact assessment. For instance, Table 5 of the NIS (NIS Page 57 Enviroguide Consulting 2022b) provides the number of sites with LBBG observed during winter 2015/16 (95) and the number of sites that held numbers exceeding the national and international threshold. But like for like comparison of data is not provided. Much more analysis could have been undertaken of the dataset to compare usage of sites in terms of numbers (mean, peak, min-max), densities (numbers per area of available habitat), frequency of use, habitat quality, recorded levels of disturbance and so on. St Anne's Park is also the closest terrestrial feeding site to the LBBG roost on North Bull Island. Therefore, an assessment based on time of day would have been useful; for instance was the site used early in the morning or before dusk? behaviour possibly linked to the location of the roost site. An assessment based on size (area) would also have been useful, for example of the sites previously used, what proportion of the total inland foraging range was accounted for by the St Paul's site/St Anne's Park'.

Response: The NIS <u>does</u> assess the site in the context of the wider network, and this is set out in Table 4 of the NIS which demonstrates that the St. Anne's/St Paul's site was an important site holding the highest peak count in 2016/17. What should be noted here is that the site of the proposed development only formed part of the St. Anne's/St Paul's site. The data for all sites is detailed in Table 4 Section 7.2.2 of the NIS. It is also important to note that in the winter season 2018/19 when the site of the proposed development was no longer available to the geese an internationally important peak count of 480 birds was recorded on the remainder of the St Anne's/St Paul's lands. Contrary to what is suggested in the Parks Report, site importance has proved to be variable over the last six seasons and the loss of part of the St Paul's site has resulted in these birds relocating to other sites in subsequent winters. See Table 11 of the NIS and Section 7.2.3 for discussion.

While the suggestion that 'Much more analysis could have been undertaken on the dataset.....' is not unreasonable in itself, it is deemed outside the scope of the NIS which has the sole purpose of determining if the proposed development will not have significant effects on the integrity of these European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of these European Sites'. Given that the data provided in tables 4,5 and 11 has demonstrated that the LBBG have successfully relocated and that the proposed development will not have any impact on European sites, it has fulfilled its scope and purpose.

The Parks Report states that 'The NIS presents data to suggest that there are now a total 149 known ex-situ inland feeding sites in Dublin i.e. the current known network of ex situ sites is 149 sites. LBBG have been directly recorded at a total of 95 individual sites over the last six seasons of wintering bird surveys (2015/16 – 2021/22) i.e. 64% of the total network'.

Response: The data presented is based on the survey results and is fact.

The Parks Report further states that 'Page 56 of the NIS (Enviroguide Consulting 2022b) states 'An analysis of the number of sites that supported peak counts of over 350 (1% National Importance) and 400 birds (1% International Importance) shows that there has been little or

no change in the six years surveyed and in particular, between 2016/2017 and 2018/2019 i.e. since the change in habitat at the St. Paul's sites including the site of the Proposed Development. This demonstrates that the birds were using a similar number of ex- situ feeding sites in similar numbers both before and after the St. Paul's sites were available to them.'

**Response:** The data presented on page 56 of the NIS is based on the survey results and is fact.

The Parks Report cites the following from the NIS 'This data clearly proves that while the flock numbers and number of sites being used remained consistent, the actual sites being used varied between years and within individual years. These complete, precise and definitive findings remove all reasonable scientific doubt that the loss of this tranche of habitat (i.e., the Site of the Proposed Development) to the LBBG has had no impact on them as they continue to utilise only a proportion of the sites available to them at any given time and over any given winter.

In addition, large, new ex-situ feeding resource has emerged in the Phoenix Park, with several observations of 1000 – 2000 geese feeding in early 2021'.

The scientific rationale as to why these above conclusions are reached is unclear. At best the conclusions are one hypothesis of several that could be proposed.'

**Response:** The concluding statement above is at the very least confusing and would appear to demonstrate that DCC Parks are simply unwilling to accept the evidence put in front of them. The information set out in the NIS and quoted in the preceding paragraphs extracted from the NIS are <u>fact</u> based on six years of survey work and presented factually in both tables and discussions. The information in the NIS is therefore the best up to date scientific information available.

The Parks Report states that 'The geese are likely to require a wide network of sites to account for variations in habitat quality which will affect foraging success, while the levels of human activity and disturbance at sites will vary greatly across the winter months. The grass foraging resource will also deplete during winter and while there will be some growth of grass, this is likely to vary across winters due to temperature'.

**Response:** We agree that the geese are likely to require a wide network of sites for the reasons stated above and as discussed in the NIS in Section 7.2.2.5, the existing and known sites currently provide a wide network without the proposed development site. We also contend that with the addition of the Phoenix Park site additional resources are available to the geese. It should be noted (NIS Section 7.2.3) that St. Anne's Park was severely subjected to human disturbance during Covid lockdowns.

The Parks Report states that 'Foraging decisions and the energetic consequences of those decisions are vital to the over-winter success of the geese (e.g. Chudzińska et al. 2016) and in a highly dynamic environment such as urban Dublin and relying on grassland that often has recreational use (playing fields, parks), the geese are highly unlikely to have complete knowledge about the distribution and availability of the foraging resources when they are seeking to forage inland. This will likely render them unable to forage on the sites that enable them to maximise their net energy intake at any one time, especially when a former foraging site,

the largest in the network of sites is no longer available. The number of sites used is therefore likely to vary greatly from day to day and month to month, so a conclusion that suggests that the network of sites 'removes all reasonable scientific doubt that the loss of this tranche of habitat' (i.e. St Paul's's site and environs) has or will cause an impact, is overly simplistic and not scientific'.

**Response:** The reference above (Chudzinska) relates to Pink-footed Geese Anser brachyrhynchus, on migration and given that this species has a very different biology to LBBG (their preferred food being grain or root crops) it is not particularly relevant. It is also important to note that birds on migration exhibit very different behavior than those on wintering grounds, the latter having time to gain knowledge of the distribution and availability of feeding resources, the former being in a hurry to get back to the breeding grounds. Therefore, the argument proposed above is not only without scientific foundation but is conflicted by the evidence presented in the NIS, in particular in Table 4. The statement 'The number of sites used is therefore likely to vary greatly from day to day and month to month, so a conclusion.....' is not supported by our evidence nor have they offered any evidence to support it and is therefore without made without any scientific justification.

The Parks Reports states that 'The requirement for a network of sites does not lessen the importance of a single particular site, especially one which, as in the case of the St Paul's/St Anne's Park site, has been shown over time to have supported a significant proportion of the Dublin Bay LBBG population on frequent occasions (e.g. Benson, 2009; Scott Cawley, 2017b)'.

**Response:** The NIS has shown that the 'most important site' based on peak counts has been different in all six years studied within the NIS (Table 11) with St Paul's/St Anne's Park being the most important in 2016/17. This demonstrates that the network has the proven capacity to withstand the loss of any single particular site, even one as important as the St. Paul'sPaul's/St Anne's Anne's site was in 2016/2017. It should also be once again pointed out here that the proposed development site only comprised a section of the St Paul's/St Anne's Park site.

The Parks report states that 'It may have been that the St Paul's site/St Anne's Park was a 'stepping-stone' from North Bull Island given that it is the closest terrestrial site. An alternative hypothesis is that the site may have been superiorly important due to its proximity to water i.e. the birds could fly quickly to the sea if feeling threatened. This has been shown before for example, where terrestrial foraging wildfowl use bodies of water as refuges when predators are encountered (Mayhew & Houston 1989). Benson (2009) also found that during the month of March, the LBBG confined their terrestrial foraging to sites within 3km of the North Bull Island roost site, so again, distance may be an important factor'.

**Response:** This statement is conjecture without any scientific information offered to support this suggestion. However, it should be pointed out again that the proposed development site forms only part of the St Anne's/St Paul's site and there is still grassland available to the LBBG at St Anne's/St Paul's and should the above statement have any basis in fact there is still grassland available to them at this site.

The Parks Report states that 'It would have been interesting to see how the sites are used

monthly by the geese throughout the winter. It may be that the birds use the best sites (resources) first, earlier in the winter, then as the feeding resource (grass) depletes, then the geese spread out to a greater number of sites. In this way the loss of the St Paul's feeding site and wider area of St Anne's Park may have caused negative impacts due to the loss of the best resource, closest to the North Bull Island roost site, meaning that the geese need to move around a greater number of feeding sites. Again this shows that a simple examination of the number of sites used in any given winter, without incorporation of factors such as site area, quality of foraging resource, disturbance levels, distance to roost site etc.. is meaningless'.

Response: This is also conjecture on the Parks Department part. The monthly data is available in the Appendices to the NIS but the point of the NIS is to demonstrate that the birds have successfully relocated to other sites following the loss of the proposed development site without any significant impact i.e. whether or not the Proposed Development will have significant effects on the integrity of these European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of these European Sites'. This has been demonstrated throughout the NIS. Anything else in the extract from the Parks Report above is speculation and unscientific.

The Parks Report suggests that 'The reasoning above also explains why the conclusion that the geese only use a proportion of the available sites (33% on average) (Page 59 of the NIS) and that there is ample additional 'capacity' in the network is incorrect, and with no scientific basis. Simply, not all sites may be accessible or 'profitable' all of the time. The value of a site to a foraging goose will be a product of the nutritional value gained minus the energetic costs of flying to the site. But the net value will also depend on other factors such as (perceived) predation or disturbance risk, and intraspecific competition, which is the reduction in food intake linked to the density of competitors i.e. other foraging geese.'

Response: The conclusion that the geese only use a proportion of the known sites is based on recorded usage over a period of 6 years and the data to support that is set out in the above referenced Tables in the NIS. While the statement 'the net value will also depend on other factors such as (perceived) predation or disturbance risk, and intraspecific competition, which is the reduction in food intake linked to the density of competitors i.e. other foraging geese' may be valid over a short time period the survey data is sufficiently extensive to eliminate this as a factor in the longer term. We do not understand the reference to 'other foraging geese'. Do they mean other species of geese? Other species of geese do not compete with LBBG in the Dublin Bay sites.

The Parks Report states that 'Overall, the assessment of the available inland site network for LBBG in Dublin and the question as to whether there are sufficient foraging areas to support the goose population is a complex issue requiring more analysis than provided in Section 7.6.1 of the NIS (In-combination effects, Page 87 onwards of the NIS Enviroguide Consulting 2022b). Whether sufficient good quality and undisturbed foraging areas remain to support the goose population is the key question and is unlikely to be answered by simply assessing summary data, as done in the current NIS. However, an extensive set of data has been collected over many years which may enable quantitative predictive models to be employed in the future. The answer to the question is unlikely to be unsurmountable and various modelling techniques could be employed such as behaviour-based models which have grown in use and been applied ever more widely since the 1990's to various waterbird species and issues such

as habitat loss and disturbance (Pettifor et al. 2000a). For example, they have been used to determine the effects of habitat loss on the dark-bellied race of the brent goose Branta bernicla (Pettifor et al. 2000b)'.

**Response:** The scope of the NIS is to determine if the proposed development will have significant effects on the integrity of these European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of these European Sites The SCI under consideration is LBBG and it has been demonstrated that 'Based on the best and most recent scientific information available to the authors of this report and including the analysis of such information as set out above, it can be determined beyond reasonable scientific doubt that the loss of ex-situ inland feeding habitat at the site of the Proposed Development will have no adverse impacts on of Light-bellied Brent Geese in view of their Conservation Objectives of "Distribution" and "Population Trend". This is concluded based on International, National and Local Population Trends which are trending to stable or increasing(https://birdwatchireland.ie/app/uploads/2022/04/iwebs\_trends\_00000\_National.html) and the scientific evidence that the birds' Distribution pattern has not been adversely impacted as they relocated successfully when the Proposed Development site became less than optimal for their use and that there is adequate additional ex-situ feeding available to them to support both current and potentially increased populations. There is no significant decrease in the range, timing and intensity of use of areas by light-bellied brent goose, other than that occurring from natural patterns of variation'.

The evidence contained within Tables 4, 5, 11 and 12 of the NIS clearly demonstrate that there has been no overall change in distribution and the information detailed in 7.3.2 and 7.3.3 demonstrates that the population is stable or increasing – the parks department even concede that 'The numbers should perhaps be regarded as stable, rather than increasing for the aforementioned reasons.....'

The NIS has also demonstrated that this figure is ca. 7000 birds for the Dublin Bay area which the Park Department initially dispute but then go on to cite on more than one occasion throughout the document. The NIS further demonstrates that the breeding season immediately following the 'loss' of the proposed development site was an extremely successful one (based on the number of juvenile birds counted in the flocks) followed by two average ones in 2020 and 2021. Therefore, the loss of the proposed development site has not resulted in any 'carry over' effects.

The Parks Report concludes the assessment of the importance of St Anne's Park and assessment of wider network of inland feeding sites by stating 'Finally, the fact that a 'new ex-situ feeding resource has emerged in the Phoenix Park' and is reported in the NIS as a positive finding is also not necessarily the case. At over 8km from North Bull Island the energetic demands of flying to this site may far exceed their value. That the geese may now need to travel this distance to forage is actually a worry'.

**Response:** We are at a loss to understand this statement, particularly if the suggestion is that the discovery of an additional resource is a cause of concern" Given that the geese have been known since 2008 to travel up to 12-15 km from the roost site (Benson p567) a distance of 8km would not suggest any change in behaviour since then. This statement would appear to further demonstrate the negative and conflicted approach that this team have taken to the NIS.

#### 3.4 Expertise of NIS Project Team

The Parks Report states that 'It should be noted that DoEHLG (2009) states that 'Case law of the ECJ has established that AA must be based on best scientific knowledge in the field. Accordingly, the NIS must be prepared by a person or persons with the requisite ecological expertise and experience, supplemented as necessary by additional expertise and experience....and produced in a scientifically complete, professional and objective manner'. In this regard we are not satisfied that the NIS 'demonstrates sufficient expertise, scope and focus in relation to the ecological or other issues'.

**Response:** We point out that the expertise of the team that produced the NIS is detailed in Section 2.2 of the NIS. We would also point out that all of the Enviroguide Consulting team are committed conservationists and promote the protection and enhancement of biodiversity. Two of the lead authors of this NIS, Jim Dowdall and Eric Dempsey have a long-established track record in carrying out conservation work as members and officers of Birdwatch Ireland and other conservation bodies.

The expertise of the Enviroguide Consulting team is set out in the NIS as follows:

Jim Dowdall, Director, has an MSc in Chemistry and LLM in Environmental and Natural Resources Law. He is an experienced ornithologist having over 40 years' experience with particular interest in population dynamics and bird identification. He has published extensively in both National and International Ornithological Journals, the most recent being in the Auk, describing the discovery of a new species of storm petrel to science by a team of Irish and American ornithologists of which he was part. Jim has served on the Irish Rare Birds Committee, the Cape Clear Bird Observatory Council and three terms as a board member of Birdwatch Ireland the most recent ending in June 2019.

Liam Gaffney, Senior Ecologist, has a B.Sc. in Zoology (Hons) and a M.Sc. (Hons) in Wildlife Conservation and Management, from University College Dublin, and a wealth of experience in desktop research, literature scoping-review, and report writing, as well as practical field experience (Habitat surveys, Invasive species surveys, Wintering bird surveys, large mammals, fresh water macro-invertebrates etc.). Liam has extensive experience in compiling Biodiversity Chapters of EIARs, EcIAs, AA screening and NIS reports, and in the overall assessment of potential impacts to ecological receptors from a range of developments. Liam is also a Qualifying member of CIEEM, the Chartered Institute of Ecology and Environmental Management.

**Eric Dempsey,** Principal Ornithologist, is an Environmental Consultant and Ornithologist who has worked on a wide range of conservation, research and ecological monitoring projects across Ireland. Eric is the author of the best-selling books, The Complete Field Guide to Ireland's Birds and Finding Birds in Ireland and is experienced in coordinating and undertaking surveys along with being highly proficient in report writing and data management. Eric is very experienced with all survey methodology and has inputted in various Environmental Impact

Assessment Reports, Environmental Assessments and Appropriate Assessments. Eric is currently part of the team of field ornithologists undertaking the long-term Dublin Bay Wetlands Survey.

**Brian McCloskey**, graduate Ecologist and experienced Ornithologist, has 11 years surveying experience and is a longstanding and active member of Bird Watch Ireland. Brian has provided a range of Ornithology survey work for ecological consultancies, e.g., Vantage points surveys of Gulls, Terns, Raptors, Waders and Wildfowl; hinterland surveys of the above as well as riverine species; and breeding waders and country birds. Brian is highly experienced with all survey methodologies and with surveying all species groups of Irish birds and migrants.

**Siobhán Atkinson,** Senior Ecologist, has a B.Sc. (Hons) in Environmental Biology and a Ph.D. in Freshwater Biology from University College Dublin, and extensive experience in desktop research, literature review and reporting, as well as practical field and laboratory experience including environmental DNA analysis, freshwater macroinvertebrate sampling and identification, fish sampling and processing and habitat surveying. Siobhán has prepared Ecological Impact Assessments (EcIA), Stage I and Stage II Appropriate Assessment Reports, Habitat Surveys and Invasive Species Surveys and input and reviewed Ecological and Environmental assessments for several EIA Reports.

**Shannen O'Brien,** Project Ecologist, has a B.A. in Zoology from Trinity College Dublin and a M.Sc. Hons. in Wildlife Conservation and Management from University College Dublin, and has experience in desktop research, report writing, and literature scoping-review, as well as practical field and laboratory experience (Pollinator surveying, sampling and identification, habitat surveying, invasive species surveying, etc.). Shannen has prepared Stage I and Stage II Appropriate Assessment Reports, Invasive Species Surveys, Ecology Statements, and Ecological Impact Assessments (EcIA).

We stand by the expertise of the team that produced the NIS both in terms of the professionalism and objectiveness employed by the team in producing the NIS.

The Parks Report also states 'we are not satisfied that the NIS 'demonstrates sufficient expertise, scope and focus in relation to the ecological or **other issues** (our emphasis)'

**Response:** This is a generalised statement with no specific issues actually identified.

#### 3.5 Analysis of Colour Ring Data

The Parks Report states that 'Colour-ring data was examined in the NIS to support the conclusion that LBBG are not site faithful. Page 68 of the NIS states 'Therefore, a minimum of 29 additional ex-situ inland feeding sites were being used by the 64 colour ringed LBBG originally identified at St Paul's College Pitches during the past six survey seasons This provides incontrovertible evidence that LBBG are/were not dependant on the St Paul's sites solely for winter feeding but were using, and will continue to use, a wide selection (i.e. a network) of other exsitu feeding sites around Dublin'. The rationale used here is confusing. Did the authors of the NIS think that the geese would die of starvation when unable to use the St Paul's site? They are likely to redistribute to other inland foraging sites. But the <u>unanswered question</u> is what

affect the loss of X% of the foraging total inland foraging resource has on the goose population, especially the loss of a resource that had formerly been shown to be of major importance in terms of size/area and number of geese that it could support. Section 7.2.3 of the NIS however does acknowledge the variation is use of sites, likely attributed to differing levels of human activity – but this only highlights the need for a network of suitable sites'.

**Response:** We can confirm that the authors of the NIS have fully considered the welfare of the geese as part of the assessment of potential impacts. However, we are concerned that the authors of the Parks Report have not fully understood the reasoning for including the ring data. The NIS uses ring data to demonstrate that:

- An analysis of the colour-ringed Light-bellied Brent Goose data from the 2015/16 and 2016/2017 Scott Cawley Ltd ex-situ inland feeding site surveys (as detailed in Section 7.2) shows that a total of 64 colour-ringed Light-bellied Brent Geese, recorded at the St Paul's sites, were also recorded at 16 other ex-situ inland feeding sites during the same winters. This indicates that the LBBG populations were dispersing widely to other inland feeding sites during the 2015/16 and 2016/17 peak count periods and were not site-faithful to the St Paul's College Pitches.
- In total, up to 30 ex-situ inland feeding sites were being used by birds from these 64 colour ringed LBBG previously identified at St Paul's College Pitches during the survey periods.
- LBBG are not reliant on St Paul's College pitches (including the site of the Proposed Development) for winter feeding but were using, and will continue to use, a wide selection of other *ex-situ* feeding sites around Dublin.

This scientific evidence demonstrates that birds displaced from the site of the proposed development redistributed themselves throughout the network of sites, and it also demonstrates that they had been doing this even when the site of the proposed development was available to them.

#### 3.6 Consideration of the Effects of Disturbance upon the Geese

The Parks Report states that 'The NIS largely ignores how human disturbance, an inevitable consequence of the species strategy to forage terrestrially, may affect LBBG during winter. This requires greater assessment, analysis and understanding in the overall impact assessment. Disturbance can be regarded as predation risk (Beale & Monaghan, 2004; Tombre et al., 2005; Klaassen et al., 2006) and there is some evidence that birds have a higher perceived risk of predation while feeding inland (Inger et al. 2006b). Behavioural responses to disturbance can vary from subtle declines in intake rates to more serious changes such as avoidance of entire areas or sites (Mitchell et al. 1989). Disturbance can cause both an increase in energy expenditure by forcing birds to frequently move away from the source of disturbance, and also a decrease in energy intake by preventing them from foraging in preferred areas (e.g. Stillman et al., 2015). It can be argued that due to large number of factors influencing the foraging behaviour of animals, a wide variety of strategies may be optimal and such strategies are, most likely, environment- and species-specific (Chuszińska et al. 2016).

The fact that a bird flies away from a disturbance does not automatically imply a serious negative effect if the bird has alternative habitat to go to, of similar quality and/or if birds return to

the former area once the disturbance event has finished. However, the fact that a bird remains and does not fly away from human presence does not imply that they are unaffected by it. Rather they may be constrained to stay in the area but may suffer costs such as reduced foraging time (Gill et al. 2007) or physiological changes such as increased heart rate and heightened vigilance rates (Holmes et al. 2005), the latter two of which results in increased energetic costs. Avoidance of human disturbance inevitably influences habitat choice (Frid & Dill, 2002), a factor pertinent to the current assessment'.

**Response**: As previously stated, the NIS is for the sole purpose of determining if the proposed development will have significant effects on the integrity of these European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of these European Sites. The issues referred to in the above paragraph are outside the scope of the NIS and perhaps should be addressed within a management strategy produced by the NPWS or Local Authority (including Parks Department) for the species.

It should be noted that (NIS Section 7.2.3) that St. Anne's Park in general showed little to no usage by LBBG throughout the winter of 20/21, with 12 geese recorded on Site 11, St. Anne's (Southern Hill) on one occasion, and droppings recorded on just one Site: Site 10, 'St. Anne's 3 (Pitches 9-16) in November and December 2021. This was despite all pitches being maintained in suitable condition for LBBG according to the surveyor i.e., short sward and well managed. The lack of use of the St Anne's pitches is attributed to a high level of human activity there during Covid imposed lockdowns.

Price (2008), which is cited by the Parks Report, concludes that 'Birds tend to overestimate the risk associated with humans rather than underestimate it and risk injury and therefore are more likely to partially habituate to harmless and repetitive human disturbance rather than lose all 'fear' towards humans. As a bird's response dynamically varies with its current assessment of risk and the response is most likely to be context and species-specific, it is difficult to predict with confidence, how birds will react to increased incidences of human disturbance.

The Parks Report states that 'Birds will also suffer more of an impact when already under pressure, for example, in cold weather or storm events when struggling to feed enough to survive. When the effects of disturbance reduce species fitness<sup>5</sup> (i.e. reduce survival or reproductive success) then consequences at population level may result, and numbers of birds decline, at site-level and beyond'.

**Response:** There is nothing in the NIS to suggest otherwise. On the contrary the NIS has demonstrated that there has been no stress on the species since the loss of the proposed development site.

The Parks Report states 'In relation to LBBG, Inger et al. (2006a, 2008) believe that the geese will always preferentially forage on and achieve better body condition by utilizing marine resources. Evidence also suggests that the geese have a higher perceived risk of predation while feeding inland (Inger et al. 2006b). That the geese in Dublin Bay need to forage terrestrially in the manner in which they do therefore suggests that the inland foraging sites are critical to overwinter survival.

It is a perhaps a human perception that LBBG has adapted successfully to terrestrial foraging and has habituated successfully to human presence with no consequence. Moreover, science believes that the inland foraging phenomenon of LBBG is a consequence of the geese being faced with a low risk but unprofitable resource, (i.e. intertidal Zostera spp.) responding by foraging in high-risk, terrestrial grassland habitats. But the trade-off is managed by elevating both vigilance levels and foraging rates (Inger et al. 2006b). The loss of the largest and closest grassland foraging site to North Bull Island should therefore not be taken lightly'.

Response: The biology here is outside the scope of the NIS which is to determine if the proposed development is will have significant effects on the integrity of these European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of these European Sites'. However, the paper cited above (Inger et al) concludes that 'By remaining behaviourally plastic, the geese are able to adapt novel trade-off strategies to use alternative prey types.' In other words, the geese have demonstrated their adaptability to change. It should also be pointed out here is that the proposed development comprises only a portion of the St Anne's Park sites.

#### 3.7 Assessment/Consideration of the Zostera Food Resource

The Parks Report states that 'the NIS acknowledges that the internationally important population of LBBG, a SCI species for both North Bull Island SPA and South Dublin Bay & River Tolka Estuary SPA, feeds on the stands of the Eelgrass Zostera spp. (Section 4.5.2 Page 13). The authors (Page 59 of the NIS (Enviroguide Consulting 2022b)) also highlight how LBBG are present in proportionally higher average numbers at inland sites during the months of January and February, demonstrating that 'they are not entirely reliant on ex-situ inland grassland sites as a food supply for the duration of the winter', likely due to depletion of Eelgrass during the winter (Robinson et al. 2004). However, the current status/condition of the important food resource Zostera spp. is not mentioned in the NIS.

It is known that the Eelgrass beds are in decline/under pressure including Zostera noltii associated with Bull Island and the beds in South Dublin Bay near Merrion Gates (e.g. Coastwatch, 2019). Consultation with the EPA also confirms that the beds are in decline (R. Wilkes pers. comm) although the reasons as to why are not fully known and warrant further investigation.

The NIS should have considered this declining intertidal food resource for LBBG because it will influence the use of inland foraging sites and rather than being an additional food resource, the network of sites are likely to become more critical for the geese in the future. There is also a potential for climate change to negatively affect this important food resource (e.g. Short & Neckles, 1999, Carr et al. 2012) so the inland site network could be more critical to the over-winter survival of the geese in the future.

**Response:** It is the stated scope of the NIS to determine whether or not the proposed development will have significant effects on the integrity of these European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of these European Sites. In that context Section 7.5 of the NIS assesses the potential for impacts from construction related discharges from the proposed development on South Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Dublin Bay SAC and North Bull

Island SPA. It has been determined that when the proposed mitigation measures are implemented this will ensure that no adverse effects on the Natura 2000 sites will arise during the Operation Stage of the Proposed Development.

The Parks Report agrees with this finding where it states:

'Construction-related surface water discharges

Based on the information provided, including mitigation measures, we are in agreement with the conclusions of the NIS that no adverse effects are likely to occur to any Natura 2000 site'.

In addition, Section 7.6.2 of the NIS addresses the in-combination effect of the Operation Phase with Ringsend Wastewater Treatment Plant and concludes:

Therefore, given the above determination and given that any water entering Dublin Bay as a result of the Proposed Development either via the WWTP or via surface water sources will become rapidly mixed and diluted to such a low level that it becomes indistinguishable from the rest of the bay water (O'Higgins and Wilson, 2005, Wilson and Jackson 2011, Scott Cawley 2017), it can be concluded on the basis of objective information with certainty that the incombination effects of the Ringsend WWTP and the Proposed Development will not have an effect on any Natura 2000 site, individually or together with other plans and projects.

Therefore, it is concluded beyond reasonable scientific doubt in the NIS that the proposed development will not have any impact on the zostera beds within any of these European sites.

The current and future status of zostera are a matter for the NPWS and the local authority and it is suggested here that a zostera management plan based on scientific studies should be drawn up and implemented by the Local Authority, if this is not already happening, rather than the Local Authority depend on (as appears to be suggested above) the do-nothing scenario where the zostera beds decline and the geese become more reliant on other food sources. The converse of this is that better management of the bay and an increase in zostera growth would likely allow birds to feed in their coastal habitat for longer over the winter.

#### 4. Summary and Conclusions:

The Parks Report does provide confirmation that data used in the NIS is factual and correct, contrary to some of the assertions contained within for the following reasons:

- The Parks Report confirms that the Dublin Bay population of LBBG is ca. 7000 birds despite disagreeing with the NIS on this in an earlier paragraph of the report.
- The authors of the Parks Report agree that the population trend is at least stable –
  which is one of the SCI Conservation Objectives. It should be noted that it is <u>not</u> the
  responsibility of the developer to improve the conservation status, but rather they
  cannot cause an adverse impact.
- The authors of the Parks Report accept the conclusions of the NIS that there will be
  no adverse impacts from the proposed development via surface water discharges on
  any Natura 2000 site. Therefore, there will be no adverse impact from the proposed
  development on the zostera which is positive and important from the perspective of
  the NIS.

In general, the Parks report does not present any scientific evidence to undermine the NIS. Any science that is quoted or suggested is either irrelevant (such as the study of Pink-footed Geese on migration Chudinska et al 2016) or outside the scope of any NIS (biological studies of LBBG). In addition, much of the criticism of the NIS in the report is based on speculation or conjecture on the part of the authors and does not form a sound basis for any scientific assessment. The lack of scientific evidence presented in the Parks Report to undermine the robust scientific evidence presented in the NIS is of great concern because the conclusions of the Parks Report in relation to Light-bellied Brent Geese formed the single reason for refusal of this application.

The questioning of the expertise by the authors of the report is without merit given that this expertise is clearly set out in Section 2.2 of the NIS and that the authors of the NIS have demonstrated that they have the skills, expertise and experience to carry out this assessment.

In summary, therefore, the NIS was produced to demonstrate that the proposed development will not have significant effects on the integrity of these European Sites, either alone or in combination with other plans and projects, taking into account the conservation objectives of these European Sites. It has been completed by competent authors and is based on the best scientific evidence available including six years of survey data and the most recently published population data showing both international and national trends. The NIS has concluded that, ensuring the avoidance and mitigation measures contained therein are implemented as proposed, the Proposed Development will not have any significant effects on the integrity of the above European sites, individually or in combination with other plans and projects.