



An
Bord
Pleanála

**Report to Inspector
(Appendix to main
report)
ABP- 308900-20
&308845-20**

Development	Boosterstown Recreational Building, Interpretive Centre and Coastal Meadow- Soundvale Limited Merrion Road/Rock Road, Boosterstown, Blackrock, Co. Dublin
Type of Application	Normal Planning Appeal 1 st Party
Topic: Appropriate Assessment	Appropriate Assessment (recommendation)
Site visit	15 th July 2022
Ecologist	Maeve Flynn BSc. PhD. MCIEEM
Planning Inspector	Louise Treacy

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1.0 Introduction

1.1. Scope of Report

This report comprises a detailed examination and analysis of the information provided as part of the First party's planning appeal in relation to the proposed Booterstown Recreation Building, Interpretive Centre, and Coastal Meadow for the purpose of Appropriate Assessment (AA) under the provisions of Article 6(3) of the Habitats Directive and the Planning and Development Act 2000 (as amended). I provide a recommendation on the AA based on the scientific information provided in the Natura Impact Statement (NIS) and other supplemental documents provided. As this development site straddles two administrative boundaries, I have also taken account of the reasons for refusal of both Dún Laoghaire-Rathdown County Council (DLR) and Dublin City Council (DCC) which relate nature conservation issues and also third-party submissions and observations on the appeal. This Report considers the proposed development site as a whole and can be applied to both planning appeal cases 308900-20 and 308845-20. I made a site visit on the 15th of July 2022 to inform the assessment

The provisions of Article 6(3) and AA only relate to implications for sites designated as European sites part of the Natura 2000 Network of sites. In Ireland this applies to SAC and SPA sites. The examination and assessments under AA are confined to the qualifying interest habitats and species for which these sites are designated, and the Conservation Objectives set for these qualifying interests. Species and habitats that do not form part of the list of qualifying interests and do not play a supporting role in maintaining site integrity are not included in the AA process and are examined as part of a separate biodiversity assessment. This includes bat species (except for the Annex II listed Lesser Horseshoe Bat) and Badger for example.

2.0 Proposed Development

- 2.1. The proposed development is described as a recreational and interpretive centre building comprising various facilities and biodiversity measures including a coastal meadow, coastal tree belt, coastal meadow flood plain and a new bird hide, retention of existing scrub area, landscaping measures and compensatory flood storage measures. A detailed description of the proposed development is provided in the Inspectors report and not repeated here. A general description of the proposed development is provided in section 3.1 of the NIS.
- 2.2. The proposed development site is an area of disused land, classified as brownfield site and dominated by scrub vegetation with pockets of dry calcareous and neutral grassland. It is located adjacent to the South Dublin Special Area of Conservation (SAC), separated by the railway line and also South Dublin Bay and River Tolka Estuary Special Protection Area (SPA) which includes the adjacent Booterstown Marsh. There is overlap between the proposed development site (DLR portion) and the Booterstown Marsh proposed Natural Heritage Area (pNHA) designation of c. 0.34ha. The Nutley stream flows along the eastern boundary of the site, parallel to the railway line. This brackish stream flows into Booterstown Marsh and has an outfall into Dublin Bay further south of Booterstown Dart station (Williamstown creek). The Trimleston stream is culverted along the southern boundary of the site and is culverted over the Nutley stream and discharges into Dublin Bay at this point.
- 2.3. Ecological considerations have been integrated into the design of the proposed developed, stated as taking into account the local sensitivities of Dublin Bay, Sandymount Sandspit and Booterstown Marsh and aims to protect the existing conditions at these sites and their importance for wintering and staging birds in Dublin Bay. Design measures include the following:
- Development footprint is located in northwestern section at greatest distance from sensitive ecological receptors and concentrate human activity away from those areas.
 - Landscaping plan developed including earth mound as visual and audible screen, retention of as much existing habitat as possible. Creation of coastal wildflower meadow using seeds of local provenance.

- Interpretive centre for use as educational facility for community and ecological groups.
- New bird hide.
- Relocation of compensatory flood storage area to less sensitive area of the site and retention of greater area of existing habitats.

3.0 Reasons for Refusal- Nature Conservation and Appropriate Assessment

In refusing the proposed development both Dún Laoghaire Rathdown County Council (DLR) and Dublin City Council (DCC) cited issues relating to AA.

DLR:

The applicant has failed to satisfactorily address the concerns of the planning authority (biodiversity officer) as set out in Item 3 (ii) of the FI request. The wintering bird surveys are only based upon two months (Feb/March) in the 2019/2020 period and the same months in the previous wintering bird season (2018/2019). The use of a site may vary over the wintering months dependent upon storms, bad weather, disturbance, foraging and energy needs of birds. Therefore, there is insufficient scientific data provided in the NIS in relation to wintering bird use of the site including those designated features of the relevant Natura 2000 sites.

In addition, the applicant's assertion that the application site is not favoured by any Special Conservation Interest wintering birds has not been supported by case studies or other best scientific data. It has not been shown on the basis of clear, objectives scientific evidence with a high degree of certainty that there will be no impact on the conservation objectives of this site. In this regard, it has not been adequately demonstrated to the Planning authority that the proposed works would not negatively impact on the biodiversity and conservation objectives of the Natura 2000 sites of the South Dublin Bay and

River Tolka estuary Spa and South Dublin Bay SAC- therefore to permit this development would be contrary to DLR County Development Plan 2016-2022

DCC:

Having regard to the information submitted with both the application and subsequent additional information received, the Planning Authority cannot be satisfied that the proposed development either individually or in combination with other plans or projects, would not be likely to have a significant effect on Wetlands as a Qualifying Interest of the South Dublin Bay and River Tolka Estuary SPA (004024) and to Species of Conservation of Interest for the South Dublin Bay and River Tolka Estuary Special Protection Area (Site Code 4024). The proposed development would therefore be contrary to policy GI24 which seeks to conserve and manage all Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas and Policy GI17 which seeks to ensure that any adverse environmental effects are avoided, remedied or mitigated where sustainable coastal recreational amenities are proposed. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

DCC concerns in relation to potential impacts on these European sites centred around pilling proposals, wintering birds and ground investigations.

4.0 Submissions and Observations

Two detailed observations made by third parties, both with interests in Booterstown Marsh, include issues related to nature conservation and appropriate assessment. Both submissions express deep concern regarding possible adverse effects to the Booterstown Marsh (pNHA) and part of the South Dublin Bay and River Tolka Estuary SPA located immediately adjacent to the proposed development site.

4.1. An Taisce

An Taisce acquired Booterstown Marsh in 1971 and it is managed in trust by Friends of Booterstown. An Taisce consider that the subject proposals do not demonstrate beyond reasonable scientific doubt that the development would not adversely impact the South Dublin Bay and River Tolka SPA and the South Dublin Bay SAC. In summary:

- Development site has a hydrological connection to SAC and SPA via the Nutley stream: Applicant has not adequately demonstrated that the proposal (construction and operation) would not result in pollution to stream (sediments and chemical pollutants) and cause adverse downstream impacts on SPA or SAC.
- Changes to hydromorphology – changes to flow of water into the marsh.
- Potential high for groundwater contamination - high water table.
- Impacts to wetland habitat and the species it supports including qualifying interests of the SPA.
- Booterstown Marsh is significant for waterfowl and overwintering birds. Bird survey data are insufficient to support NIS conclusion of no adverse effects. Surveys only conducted during months February and March 2019 and 2020. Surveys should be conducted monthly from October when species arrive to March for accurate assessment.
- Legal requirements of the Habitat Directive: Cannot have lacunae and must contain complete precise and definitive findings based on best scientific knowledge in the field. Competent authority must lay out the rational and reasoning which was used to arrive at this determination. AA must include, examination, analysis, evaluation, findings conclusions and a final determination

An Taisce made a second submission on 1st May2021, supporting the submission from Friends of Booterstown Coast. They reiterate the legal onus on An Bord

Pleanála to verify the veracity, competence and level of information presented by consultants for a planning consent. They also stated that knowledge of sites and species built up by well-informed individuals and NGOs can outweigh that of professional consultants whose site visit time is limited.

4.2. Friends of Booterstown Coast

Friends of Booterstown Coast have made a detailed submission supplemented with biodiversity information on Booterstown Marsh, survey results, pictures and video footage. The knowledge of the natural history and ecology of the site built over decades is a valuable resource and greatly contributes to the biodiversity information of Dublin Bay. As a body whose aim is to protect and manage the area, the concerns are related to continued protection of Booterstown Marsh. The following is a summary of key points made in the submission:

- Status and importance of Dublin Bay: UNESCO Dublin Bay biosphere.
- Proposed development site is buffer zone to Booterstown Marsh.
- Reference importance of Williamstown Creek and Nutley stream as part of the SPA.
- Reference to Williamstown Creek SPA
- Describe the Annex I habitats present at Booterstown Marsh.
- Importance of the area in terms of various nature conservation designations and Directives.
- Impact concerns regarding: dust emissions, ground and surface water, basement impacts, flooding and drainage.
- Bird collision and impacts of disturbance on birds of SPA.

A second submission was received on 24th March 2021 which commented on and fully supported the appeal observation made by An Taisce. They reiterated the importance of Booterstown Marsh in the context of Dublin Bay and their contention that the applicant has not adequately demonstrated that the proposal in construction or operation would not result in pollution to the Nutley stream, groundwater or hydrogeology and thereby avoid the deterioration of habitats and significant

disturbance for species for which the European sites are designated. They are not satisfied that the information submitted rules out adverse effects on the designated sites. They reference the EU Biodiversity Strategy 2021 and the fact that Member States must do more than prevent deterioration of habitats and that positive management is required to restore favorable conservation condition.

4.3. First Party Response to third party submissions

Brock McClure, on behalf of Soundvale Limited submitted a detailed response to the third-party submissions in March 2021. This report considered and responded to each issue raised and included technical information from Arup consulting engineers and Scott Cawley Ecology with updated winter bird survey results from January, February and March 2021. I also note and agree with the statement from the Applicant that the further information submitted to both DCC and DLR had addressed several the concerns raised as part of the appeal. Overall, I am satisfied that the Applicant has addressed the observations comprehensively for the benefit of the Board and I expand on a number of issues further in Section 5.4 of this report.

In response to Friends of Booterstown Coast submission as relevant to AA, the Applicant responded to issues related to the following:

- Relevant designations and directive
- Impact to the Nutley stream
- Dust emissions
- Ground water and surface water
- Basement impacts,
- Flooding and drainage
- Bird collisions
- Winter birds

In response to An Taisce submission as relevant to AA, the Applicant

- Impacts on water quality

- Impacts and on birds
- Legal requirements of the Habitats Directive

5.0 **Consideration of the Likely Significant Effects on a European Site**

5.1. **Article 6(3) of the Habitats Directive**

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB are considered fully in this section. The areas addressed in this section are as follows:

- Compliance with Article 6(3) of the EU Habitats Directive
- The Natura Impact Statement
- Screening for appropriate assessment
- Appropriate assessment of implications of the proposed development on the integrity of each European site

For the avoidance of doubt, the assessment is of the **Revised AA Screening Report and NIS** prepared for both Local Authorities in response to a request for further information (September 2020) and associated appendices and additional reports and memos submitted to the Board as part of the appeal.

5.2. **Compliance with Article 6(3) of the EU Habitats Directive:**

The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.

5.3. The Natura Impact Statement and Supplemental Information

The planning appeal is accompanied by an AA Screening report and an NIS (2020) which describes the proposed development, the project area and the surrounding area. The construction management plan is also a key document in terms of the implementation of mitigation measures. In addition to the screening and NIS, additional information was submitted as part of the First Party appeal to the Board (December 2020) to address the grounds of refusal by both DCC and DLR. These included.

- Planning Report by BMC addressing reasons for refusal
- Technical response by Arup (piling and ground conditions)
- Technical response by Scott Cawley (winter birds and bird collisions including additional winter bird survey results from November and December 2020)
- Letter from Peter Cuthbert (biodiversity)
- Letter from Kyran Colgan (invasive plant solutions)
- Letter from EirEco Environmental Consultants (ecology of the proposed development site)
- Letter from Dixon Brosnan environmental consultants (independent peer review of bird surveys undertaken)
- Letter from O'Callaghan Moran Associates (independent peer review of soils and groundwater investigations and findings)

In April 2021, the First party also submitted a detailed response to third party submissions (Brock McClure, March 2021) which included dates, times, weather conditions and results of winter bird survey /flight activity from January 2021 to March 2021. Further to this, in April 2021, Scott Cawley submitted an additional ecological memo, presenting the complete winter bird survey data set and copies of flight activity maps for the Board, collected between November 2020 and March 2021. Appendix 1 of the memo includes the full field survey recording forms and maps.

All Ecology and Appropriate assessment related documents have been prepared by staff ecologists from Scott Cawley and informed by desk study including reference material from the NPWS website and data base and by field surveys.

A description of the February/March 2019 and February/March 2020 wintering bird surveys and additional 2020-2021 waterbird surveys is provided. Surveys were undertaken over varying tidal cycles and weather conditions and at varying times of the day. A combination of flight activity surveys and camera surveys were also used to assess flight heights of birds flying over the proposed development site.

The receiving environment is described in line with standard methodology (Fossitt 2000) and results of the field surveys are presented in NIS Section 3.2 and considered further in my assessment below.

I-WebBs (Irish Wetland Bird Survey) data for the count areas of Sandymount Sandspit and Booterstown Marsh (2013-2018) is presented in the NIS to provide a recent indication of population trends (See table 4 comparison of peak counts). Data collected supports the known fact that Booterstown Marsh and Sandymount Sandspit support large numbers of SCI and other bird species and is considered to be a critically important site in the context of supporting the SCI bird populations of Dublin Bay as a whole. No SCI bird species were recorded on the proposed development site over the extensive period of surveys with the exception of a number of Teal on the Nutley stream.

The scientific assessment to inform AA is presented in sections 5 and 6 of the NIS and in the documentation submitted to the Board as part of the appeal. The conservation objectives of the various qualifying interest features and special conservation interest species are listed. Impact pathways are identified and the assessment of likely significant effects which could give rise to adverse effects on site integrity presented in Tables 7, 9, 11, 14, 16.

Mitigation measures are presented in the NIS and detailed in full in the Construction Management Plan (CMP) and invasive species management plan. An assessment of potential in-combination effects is presented in Section 6 of the NIS.

The NIS together with supplemental information concludes that, following an examination, analysis and evaluation of the relevant information, including the nature of the predicted effects from the proposed development, and mitigation measures to avoid such effects, that the proposed development will not adversely affect the integrity of any European site, either alone or in combination with other plans and projects.

5.4. Adequacy of information submitted by the First party in relation to the appeal

Having reviewed the NIS and supplemental information that accompanies the first party appeal, I am satisfied that there is adequate information to undertake Screening and Appropriate Assessment of the proposed development on lands at Merrion Road, Booterstown, Blackrock Co. Dublin.

I am satisfied that all possible European Sites that could in anyway be affected have been considered by the Applicant. I bring the attention of the Inspector and the Board to an issue addressed in Section 2.1 of the First Party response to 3rd Party submissions. Friends of Booterstown Coast refer to the *Williamstown Creek* Special Protection Area. As clarified by the Applicant, Williamstown Creek (wetland area south of Booterstown Dart station, adjacent to railway line) is within South Dublin and River Tolka Estuary SPA but is not an SPA in itself. Likewise, Booterstown Marsh is also part of the South Dublin and River Tolka Estuary SPA. It is also correct to state that no part of the proposed development site is within a European Site. The Booterstown pNHA designation does overlap with the southern edge of the development site but this designation does not relate the Natura 2000 designation or European Site status and is excluded from AA (See Figure 1).



Figure 1. Proposed Development Site (Red boundary) in relation to Booterstown Marsh and Williamstown Creek and protected sites.

I am satisfied that all ecological survey work and reporting has been undertaken and prepared by competent experts in line with best practice and scientific methods. Information on the competencies and professional memberships of the Ecological team are provided in the NIS. The Ecologists are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) and as such are bound by the CIEEM code of professional conduct which has an explicit obligation regarding the application of objectivity and impartiality to information and professional advice provided. I find that the insinuation made by An Taisce regarding the independence of professional ecologists' assessment of development projects is not justified. The veracity of the data collected by Scott Cawley ecologists has also been upheld by other Ecologists with knowledge of the site including Paul Murphy of EirEco and by an independent peer review undertaken by Dixon Brosnan.

In light of the reasons for refusal relating to uncertainty of the importance of the proposed development site to SCI bird species, additional bird surveys have been

undertaken to cover the recommend IWeBs winter survey period. The results of this additional survey work confirmed the findings from the previous, that the proposed development site is not an area favoured or used by SCI bird species. I consider that this has been comprehensively addressed and adds greater certainty to the findings of the Ecologists.

Having reviewed the methodology, timing and data collected, I am satisfied that adequate survey data has been collected and analysis carried out to address the concerns of Local Planning Authorities.

I am satisfied that all potential impact mechanisms have been considered and assessed. Concerns raised by DCC in terms of potential impacts on hydrogeology and groundwater that could arise from ground works, piling and release of pollutants from contaminated soils have been addressed by the Applicant in the NIS and also comprehensively in the Report submitted with the First Party Appeal (December 2020).

5.5. Screening for Appropriate Assessment

The first test of Article 6(3) is to establish if the proposed development could result in likely significant effects to a European site, in which case the development is 'screened in' for further detailed assessment- appropriate assessment (stage 2).

The screening assessment undertaken on behalf of the applicant concluded that the potential for significant effects could not be ruled out for **eight European Sites** within Dublin Bay in view of the conservation objectives of those sites and thus the proposed development must proceed to (stage 2) Appropriate Assessment, and an NIS prepared to inform this stage.

In determining the potential significant effects of the proposed development, the applicant took account of current best practice guidance (Scottish National Heritage (SNH) 2016) in terms of assessing connectivity with Special Protection Areas around Dublin Bay. Data collected over the various survey periods confirmed the importance of Booterstown Marsh and Sandymount Sandspit as integral to the overall functioning

and importance of Dublin Bay for wintering birds and breeding Terns and connections between SPAs in the wider Dublin Bay. SNH guidance states that birds can travel up to 20km from designated sites and in taking this approach the applicant has included sites at some remove from the proposed development site.

Similarly, a precautionary approach has been taken in including SAC sites in the wider Dublin Bay in the screening exercise.

Potential impacts and effects considered are presented in **Table 1**.

Table 1. Summary of European Sites for which the likelihood of significant effects cannot be ruled out (Applicant).

Potential impacts and zone of influence of effects	European sites within Zone of Influence
<p>Habitat loss and Fragmentation Habitat loss and modification confined to proposed development site only</p>	No
<p>Habitat degradation as a result of change in vegetation composition Potential for seed mix (coastal wildflower meadow) to disperse to coastal sand dune habitats</p>	<p>Yes South Dublin Bay SAC North Dublin Bay SAC</p>
<p>Habitat degradation as a result of hydrological and hydrogeological impacts Habitats below the high tide line and downstream of the proposed development site (release of polluting compounds such as oil, sediments)</p>	<p>Yes South Dublin Bay SAC, North Dublin Bay SAC, Rockabill to Dalkey Island SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull SPA and Dalkey Islands SPA</p>
<p>Species mortality as a result of hydrological and hydrogeological impacts Species occurring in habitats below the tide line and downstream of the proposed development</p>	<p>Yes South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary</p>

<p>site- mobile fauna including birds and marine mammals (release of polluting compounds such as oil directly or indirectly through contamination of habitats or food supply)</p>	<p>SPA, Dalkey islands SPA and Rockabill to Dalkey Island SAC</p>
<p>Habitat degradation as result of introducing/spreading non-native invasive species Habitats within, adjacent to and potentially downstream</p>	<p>Yes South Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA</p>
<p>Habitat degradation as a result of air quality impacts Dust deposition during construction - within several hundred meters</p>	<p>Yes South Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA</p>
<p>Disturbance and displacement impacts Potentially up to several hundred meters from development boundary depending on noise, levels, vibrations, human activity and sensitivity qualifying interest species present (bird species)</p>	<p>Yes South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA and Dalkey Islands SPA</p>
<p>Bird mortality as a result of collision risk impact Collision with tall structures during construction and operation</p>	<p>Yes South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA and Dalkey Islands SPA</p>

5.6. Screening Determination (recommendation)

Having regard to the information presented in the AA Screening Report, NIS, submissions, the nature, size and location of the proposed development and its likely

direct, indirect and cumulative effects, the source pathway receptor principle and sensitivities of the ecological receptors, I concur with the applicant's screening determination that there is potential for significant effects on South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC. These European sites are immediately adjacent and ecologically connected to the site and any potential impacts would exert the greatest effect on Booterstown Marsh via the connection of Nutley stream and proximity.

Due to the dynamic movements of wintering birds and changing requirements over the winter months in particular, and the importance of Booterstown Marsh and Sandymount Sandspit in the context of Dublin Bay, it is reasonable to conclude that impacts generated at the development site could affect SCI bird species from SPA sites in wider Dublin Bay due to the known interactions and movements between these SPA sites. As screening is considered a pre-assessment stage, further analysis is required to determine the significance of such impacts and to apply any mitigation measures to exclude adverse effects. Therefore, North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA and Dalkey Islands SPA are brought forward for inclusion in the AA.

In terms of SACs in the wider Dublin Bay area, I consider that given the development type and construction requirements, there is a very low probability or possibility of impacts of such magnitude that could result in significant effects on North Dublin Bay SAC or Rockabill to Dalkey Island SAC in view of the conservation objectives of those sites. As outlined, any potential pollution related impacts during construction for example, would exert the greatest effect on those European sites in direct proximity. The likelihood of impact mechanisms reaching other SAC sites in wider Dublin Bay would be remote given the tidal movements and dilution effects of the Bay and the fact that any accidental pollution event to surface water would be intercepted at Booterstown Marsh and further south at Williamstown Creek before discharge into South Dublin Bay SAC. I do not consider that the proposed development could post a risk to Harbour Porpoise, a qualifying interest species for Rockabill to Dalkey Island SAC for the same reasons. Therefore, I recommend that North Dublin Bay SAC and Rockabill to Dalkey Island SAC can be removed from consideration as part of the AA and screened out of the AA process.

5.7. Appropriate Assessment (recommendation)

The following is an objective assessment of the implications of the proposal on the relevant conservation objectives of the European sites based on the scientific information provided by the applicant and taking into account expert opinion and submissions on nature conservation. It is based on an examination of all relevant documentation and submissions, analysis and evaluation of potential impacts, findings conclusions. A final determination will be made by the Board.

All aspects of the project which could result in significant effects are assessed and mitigation measures designed to avoid or reduce any adverse effects on site integrity are examined and evaluated for effectiveness. I have relied on the following guidance:

- DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, National Parks and Wildlife Service. Dublin
- EC (2018) Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC
- EC (2021) Assessment of plans and projects in relation to Natura 2000 sites. Methodological guidance on Article 6(3) and 6(4) of the Habitats Directive 92/43/EC

5.7.1. Relevant European sites:

In the absence of mitigation or further detailed analysis, the potential for significant effects could not be excluded for:

- South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC.
- North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA and Dalkey Islands SPA

A description of the sites and their Conservation Objectives and Qualifying Interests/Special Conservation Interests, including relevant attributes and targets for these sites, are set out in the NIS section 5- Assessment of Impacts.

I have also examined the Conservation Objectives Supporting Documents for these sites, available through the NPWS website (www.npws.ie).

Tables 2-4 below summarise the information considered for the Appropriate Assessment and site integrity test. I have taken this information from that provided by the applicant. Tables 2 and 3 detail the European sites in closest proximity to the proposed development site, namely South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC. Table 4 summarises the AA findings for remote SPA sites including North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA and Dalkey Islands SPA. I expand on certain issues further in my report.

Table 2: AA summary matrix for South Dublin Bay and River Tolka Estuary SPA

South Dublin Bay and River Tolka Estuary SPA [004024]			
Detailed Conservation Objectives available: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/C0004024.pdf			
Special Conservation Interest (SCI)	Conservation Objectives	Summary of Appropriate Assessment	
		Potential adverse effects	Mitigation measures
	Maintain the favourable conservation condition of SCI bird species	Degradation of habitat quality and food resources due to construction related emissions	Detailed pollution control measures to protect water quality
Light-bellied Brent goose, Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Bat-tailed Godwit, Redshank, Black headed Gull	Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas by wintering waterbirds	Disturbance of SCI roosting or feeding in Booterstown Marsh, Dublin Bay, Sandymount Sandspit Low risk of collision with cranes during construction	Measures to protect SCI birds from visual and noise disturbance Noise hoarding Timing of v loud works outside of most sensitive periods
Roseate Tern	No significant decline in passage population	As above	
Common Tern	No significant decline in number, location and area of roosting areas	Disturbance from main roosting area on sandbanks	Retention of scrub area on southern boundary of site Crane arm treated with UV paint or UV light beam to make detectable
Artic Tern	No significant decline in prey biomass No significant barrier to connectivity- feed during the day in wider Dublin Bay area- arrive to roost from east and se		

	Disturbance at roosting site-should occur at level that does not adversely affect number of terns among the post breeding aggregation of terns		Lighting plan
Wetlands and Waterbirds	Permanent area stable and not significantly less than 2192 ha other than that occurring from natural patterns of variation	No adverse effect on extent of wetlands area	See measures for pollution prevention

Overall conclusion: Integrity test

The applicant determined that following the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects can be excluded for South Dublin Bay and River Tolka Estuary SPA including Booterstown Marsh which is encompassed by the SPA. No wetland habitat loss will occur, and the proposed development site has been shown not to be of any significance as an ex-situ site at any time of year or conditions as assessed and evaluated through survey and analysis. No uncertainty remains.

The southern extent of the site will not be developed, and the area of scrub habitat maintained which will continue to act as a buffer to the adjoining marsh.

Adverse effects from contamination can be effectively prevented by mitigation measures ensuring the protection of the Nutley stream which connects the site with the SPA at Booterstown Marsh.

The proposed development would not delay or prevent the attainment of the Conservation objectives of the South Dublin Bay and River Tolka River Estuary SPA

Table 3: AA summary matrix for South Dublin Bay SAC

South Dublin Bay SAC [000210]				
Detailed Conservation Objectives available: https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO000210.pdf				
Qualifying feature *priority Annex I	Interest habitat	Conservation Objectives Targets and attributes (summary- inserted)	Summary of Appropriate Assessment	
			Potential adverse effects	Mitigation measures
		Maintain favourable conservation condition	Degradation of water quality from accidental construction related emissions could affect habitat quality and vegetative communities	Detailed pollution control measures to protect water quality (marine and groundwater)
Mudflats and sandflats not covered by seawater at low tide		Maintain favourable conservation condition in relation to habitat area, community extent/structure/distribution including Zostera dominated community and fine sands with Angulus tenuis		
Annual vegetation of drift lines		Restore favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation structure and composition		
Salicornia and other annuals colonising mud and sand		Restore favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation structure and composition		

Embryonic shifting dunes	Restore favourable conservation condition in relation to habitat area, distribution, physical structure, vegetation structure and composition	Degradation of water quality from accidental construction related emissions and vegetative communities Foreign seed could change vegetation structure and composition	As above No seed of different provenance will be imported to the development site coastal meadow
<p>Overall conclusion: Integrity test</p> <p>The applicant determined that following the implementation of mitigation measures the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of this European site.</p> <p>Based on the information provided, I am satisfied that adverse effects can be excluded for South Dublin Bay SAC sites in view of conservation objectives of the site.</p>			

Table 4: Summary matrix for North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA and Dalkey Islands SPA

North Bull Island SPA [004006], Baldoyle Bay SPA [004016], Malahide Estuary SPA [004025] and Dalkey Islands SPA [004172]		
Maintain or restore favourable conservation condition		
Detailed Conservation Objectives available: https://www.npws.ie		
<p>North Bull Island SPA [004006], Light-bellied Brent Goose, Shelduck, Teal, Pintail Shoveler Oystercatcher Golden Plover Grey Plover Knot Sanderling Dunlin Black-tailed Godwit Bar-tailed Godwit Curlew Redshank Turnstone Black-headed Gull (</p> <p>Wetland and Waterbirds</p>		
Summary of Appropriate Assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas by wintering waterbirds	Degradation of habitat quality and food resources due to construction related emissions Disturbance of SCI roosting or feeding in Booterstown Marsh, Dublin Bay, Sandymount sandspit	Detailed pollution control measures to protect water quality Measures to protected SCI birds from visual and noise disturbance Noise hoarding Timing of v loud works outside of most sensitive periods

	Low risk of collision with cranes during construction	Retention of scrub area on southern boundary of site Crane arm treated with UV paint or UV light beam to make detectable Lighting plan
Baldoyle Bay SPA [004016] Light-bellied Brent Goose, Shelduck, Ringed Plover, Golden Plover, Grey Plover, Bar-tailed Godwit		
Summary of Appropriate assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas by wintering waterbirds	As above	As Above
Malahide Estuary SPA [004025] Great Crested Grebe, Light-bellied Brent Goose, Shelduck, Pintail, Goldeneye, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Knot, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Redshank		
Summary of Appropriate assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
Long term pop trend stable or increasing No significant decrease in range, timing or intensity of use of areas by wintering waterbirds	As above	As above
Dalkey Island SPA [004172] Roseate Tern, Common Tern, Artic Tern		
Summary of Appropriate assessment		
Conservation Objectives Targets and attributes (summary)	Potential adverse effects	Mitigation measures
No significant decline in passage population No significant decline in number, location and area of roosting areas No significant decline in prey biomass	As above Disturbance from main roosting area on sandbanks at Sandymount Sandspit in particular during periods of-very loud construction noise	As above

<p>No significant barrier to connectivity- feed during the day in wider Dublin Bay area- arrive to roost from east and se</p> <p>Disturbance at roosting site- should occur at level that does not adversely affect number of terns among the post breeding aggregation of terns</p>		
<p>Overall conclusion: Integrity test</p> <p>The applicant determined that following detailed assessment of potential impacts and the implementation of mitigation, the construction and operation of this proposed development alone or in combination with other plans and projects will not adversely affect the integrity of these European sites in view of the conservation objectives of those sites.</p> <p>Based on the information provided, I am satisfied that adverse effects can be excluded for these SPA sites that are remote from the proposed development site and that no effects of any significance will occur to SCI bird species from these SPAs utilising habitats near the development site. The proposed development site has been shown not to be of any significance as an ex-situ site at any time of year or conditions as assessed and evaluated through survey and analysis. No uncertainty remains. The southern extent of the site will not be developed, and the area of scrub habitat maintained which will continue to act as a buffer to the adjoining marsh. Significant disturbance of congregating terns has been excluded. Adverse effects from contamination can be effectively prevented by mitigation measures ensuring the protection of the Nutley stream which connects the site with the SPA at Booterstown Marsh</p> <p>The proposed development would not delay or prevent the attainment of the Conservation objectives of any of these SPA sites in Dublin Bay.</p>		

5.7.2. Potential for Adverse effects

In this section, I address key issues related to the reasons for refusal of planning and any remaining issues raised in the appeal and by third parties in more detail. I also acknowledge and accept the points made in the First Party response to Third party submissions.

Excluding adverse effects on South Dublin Bay and River Tolka Estuary SPA and South Dublin SAC

In their examination and assessment of the proposed development, Dún Laoghaire Rathdown County Council and Dublin City Council were not satisfied that adequate information was available to come to a determination of no adverse effects on South Dublin Bay and River Tolka Estuary SPA or South Dublin Bay SAC (DLR).

A key concern also reflected in the third-party submissions was the timing and extent of the winter waterbird surveys used to inform the NIS and AA. In the original planning application, wintering bird surveys were undertaken in February and March 2019 and 2020, just two months out of the overall wintering period of October to March.

The applicant has addressed this as part of the planning appeal with the commissioning of additional surveys of wintering waterbirds undertaken by Scott Cawley. Having reviewed the methodology, timing and frequency of the surveys, I am satisfied that they have been undertaken in line with best practice and have added to the information on the bird species composition and distribution of SCI birds in particular within a zone of influence of the proposed development.

The additional surveys also allowed for extended coverage of the proposed development site and the combination of vantage points used for IWeBs survey methodology, flight activity and camera surveys have shown beyond reasonable doubt that the site is not an important area used by SCI bird species of the neighbouring SPA, incorporating Booterstown Marsh.

In the peer review of the NIS, Dr. Sorcha Sheehy of Dixon Brosnan environmental consultants concluded that while there were gaps in the surveys data that led to a refusal of planning, the examination of all available survey data supported the conclusions that the proposed development site is not of value to SCI birds. As predicted by Dr Sheehy, the additional data collected in 2020 and 2021 did not change the conclusions in relation to the site or the mitigation required.

I am satisfied that the NIS and supplementary information provided as part of the planning appeal has examined the potential for all impact mechanisms in terms of the conservation objectives of the South Dublin Bay and River Tolka Estuary SPA and SPAs in Dublin Bay. The potential for adverse effects can be effectively ameliorated by both design-based and applied mitigation measures related to surface water and ground water quality, noise reduction, visual screening, lighting design and collision risk.

I am satisfied that any uncertainty in terms of impacts on conservation objectives of the SPA sites have been addressed in the first party appeal for the proposed

development. I am satisfied that the proposed development would not result in any significant decrease in range, timing or intensity of use of areas by wintering waterbirds or breeding terns.

A significant concern of both Third-party submissions is the potential for contamination of Booterstown Marsh part of the South Dublin Bay and Tolka River Estuary SPA and also South Dublin Bay SAC. The Nutley stream is a potential conduit for any surface water runoff, construction related runoff, accidental spillages of hydrocarbons and other pollutants which may result in adverse downstream impacts on the SPA and SAC or to groundwater.

An Taisce also raise concerns regarding potential changes to the hydro-morphology of the Nutley stream which may result in changes to flow of water into the marsh.

I am satisfied that these potential impacts have been addressed in the NIS and as part of the planning appeal in detail and that mitigation proposed will be effective in preventing such effects. In addition, I also acknowledge that the flood compensatory storage area has been relocated from its original position at the south eastern portion of the site along the Nutley stream to the north eastern portion of the site away from sensitive ecological receptors of Booterstown Marsh.

The value of the site as a *buffer* is raised by the Third parties. While the proposed development site has been shown to have no significant value in terms of supporting the SCI bird species of the SPA site and that all potential water quality, ground water and vegetation including invasive species impacts can be effectively managed and protected and adverse effects avoided, could the proposed development site have a role in acting as a protective environmental buffer to the adjacent Marsh, SPA and SAC?

Given that both the proposed development site and Booterstown Marsh are located between the Merrion Road, a very busy road and the Dart line on the edge of urban Dublin, the area is already subject to regular disturbance. In locating the proposed building on the north-western part of the site, the relocation of flood compensatory area, the expanded coastal meadow and retention of scrub habitat the developer has maintained a buffer area between the physical building aspect of the development and Booterstown Marsh and other landscaping details further add to the prevention of

disturbance to adjacent protected sites and SCI bird species. Furthermore, mitigation measures during construction and surface water management such as SUDs during the operational phase will buffer the adjacent SPA and SAC from significant effects.

5.7.3. Mitigation Measures and Monitoring

A summary of mitigation measures is presented in the tables above. Full details are provided in the NIS and Construction Management Plan and summarised below. I consider that all measures proposed are implementable and will be effective in their stated aims. Furthermore, an Ecological Clerk of Works will be employed to ensure that measures are implemented as prescribed. A summary of mitigation measures is presented in Table 5 below.

Table 5: Summary of Mitigation Measures to avoid adverse effects on European Sites

Measures to protect surface water quality and groundwater quality during construction:	CIRIA guidance adhered to, Silt traps, good construction practice, bunded areas, secured areas for hazardous materials, fuels, lubricants, onsite treatment for surface water run off, use of settlement tanks/ponds and management of same
Measures to protect surface water quality during operation:	Sustainable urban drainage systems (SUDS) including green roofs, bio-retention systems, water butts and permeable paving
Measures to avoid habitat degradation as a result of changes in vegetation composition	No seeds of different/ external provenance will be imported to the site- on site seed harvesting to develop coastal meadow habitat creation

<p>Measures to eradicate/control the spread of non-native invasive species</p>	<p>Invasive species management plan for Japanese Knotweed on site and post construction monitoring programme (5 years)</p>
<p>Measures to protect SCI birds from disturbance during construction:</p>	<p>Ecological clerk of works, protection and retention of scrub habitat on southern boundary</p> <p>Noise reducing hoarding August-March (effectiveness confirmed by noise specialists)</p> <p>Works that produce loud irregular noises including piling will not take place during August to March restricted to April and July</p> <p>Construction lighting kept to min and diverted away from coastline, Sandymount Sandspit and Booterstown Marsh</p> <p>Toolbox talks on sensitivity of site</p>
<p>Measures to protect SCI birds from disturbance during operation:</p>	<p>Design: development footprint at north-western section of site, landscaping plan including earth mound to provide visual and audible screening</p> <p>Retention of scrub habitat</p> <p>Coastal meadow and habitat management plan</p> <p>New bird hide – SE corner of site</p> <p>Operational lighting designed to maintain a dark corridor along Nutley</p>

	stream- low intensity lighting to be used on site 0-1 lux
Measures to avoid SCI collision risk with cranes during construction:	UV light beam or UV paint to illuminate crane arm making it detectible in low light conditions

6.0 Appropriate Assessment Conclusion: Integrity Test

In screening the need for Appropriate Assessment, it was determined that the proposal to develop the recreational building, interpretive centre and Coastal meadow at Booterstown, Blackrock Co. Dublin had the potential to result in significant effects on South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC and that Appropriate Assessment was required in view of the conservation objectives of those sites. In addition, a further four SPA sites were considered to have some risk of significant effects and the following sites were brought forward for more detailed assessment as part of the Appropriate Assessment, North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA and Dalkey Islands SPA.

Following a detailed examination and evaluation of the NIS all associated material submitted with the planning appeal as relevant to the Appropriate Assessment process and taking into account submissions of third parties, I am satisfied that based on the design of the proposed development, combined with the proposed mitigation measures, adverse effects on the integrity of South Dublin Bay and River Tolka Estuary SPA and South Dublin Bay SAC can be excluded with confidence in view of the conservation objectives of those sites.

Adverse effects on site integrity can also be excluded from the following European Sites: North Bull Island SPA, Baldoyle Bay SPA, Malahide Estuary SPA and Dalkey Islands SPA in view of the conservation objectives of those sites

My conclusion is based on the following:

- Detailed assessment of all aspects of the proposed development that could result in significant effects or adverse effects on European Sites within a zone of influence of the development site.
- Consideration of the conservation objectives and conservation status of qualifying interest species and habitats
- A full assessment of risks to special conservation interest bird species and qualifying interest habitats and species
- Complete and precise survey data and analysis of wintering birds in particular
- The proposed development site has been scientifically verified as not being of significance to or an area favoured by SCI bird species at any stage of the wintering or summer seasons
- Application of mitigation measures designed to avoid adverse effects on site integrity and likely effectiveness of same
- The proposed development would not undermine the favourable conservation condition of any qualifying interest feature or delay the attainment of favourable conservation condition for any species or habitat qualifying interest for these European sites.



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20 December 2022