

Appropriate Assessment Screening & Natura Impact Statement – Information for a Stage 1 (AA Screening) and Stage 2 (Natura Impact Statement) AA for a proposed Large-scale Residential Development (LRD) at Balbriggan, Co. Dublin.



14th March 2024

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd. **On behalf of:** Dean Swift Property Holdings Unlimited.

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Project	Appropriate Assessment Screening and Natura Impact Statement – Information for a Stage 1 (AA Screening) and Stage 2 (Natura Impact Statement) AA for a proposed Large-scale Residential Development (LRD) at Balbriggan, Co. Dublin.			
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Int. oduction

The following Appropriate Assessment Screening and Natura Impact Statement – Information for a Stage 1 (AA Screening) and Stage 2 (Natura Impact Statement) AA has been prepared by **Alternar Ltd.** at the request of Dean Swift Property Holdings Unlimited for a proposed Large-scale Residential Development at Balbriggan, Co. Dublin.

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

The AA Screening stage examines the likely significant effects of the proposed development, either on its own, or in combination with other plans and projects, upon a European site and considers whether, on the basis of objective scientific evidence, it can be concluded, in view of best scientific knowledge and the conservation objectives of the relevant European sites, that there are not likely to be significant effects on any European site.

The Natura Impact Statement examines whether the plan or project, either alone, or in combination with other plans and projects, in the view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of the European sites.

Following the submission of the proposed development (Ref LRD0006/S3), a Request for Additional Information (RFI) was submitted by Fingal County Council to Hughes Planning and Development Consultants dated 05th September 2023 (PF/1993/23). Specifically in relation to the Appropriate Assessment Screening Report, item 1 stated that:

"1. The Planning Authority notes the findings of the Appropriate Assessment Screening report submitted in support of this application and the conclusion that 'on the basis of the content of this report, the competent authority is enabled to conduct a Stage 1 Screening for Appropriate Assessment and consider whether, in view of best scientific knowledge and in view of conservation objectives of the relevant European sites, the Proposed Development, individually or in combination with other plans or projects is likely to have a significant effect on any European site.'

The Planning Authority is not satisfied in relation to the robustness of the information provided and requires that Further Information is provided by the Applicant in relation to the following specific areas:

- (a) The report should provide further detail to emphasise that the proposed SuDS are best practice in relation to development of the nature proposed in order to prevent flooding and they are not included or designated solely to remove pollutants and silt from discharge to local water courses with direct links to European Sites; where appropriate case law can be referenced.
- (b) The applicant is required to provide further information in relation to the construction phase of the project to demonstrate that, without specific mitigation, surface water run-off will not cause significant levels of pollution or silt being discharged into the marine environment via the Bremore Stream.
- (c) Given the location of the development site and its distance from European Sites and the dilution effects of the marine environment, LSEs on European Sites is unlikely. These matters should be discussed and demonstrated within the Appropriate Assessment Screening, that without mitigation, this can be achieved.
- (d) The Appropriate Assessment Screening concludes that there will be no LSEs on SCI species of the relevant SPAs. This is based on the un-suitability of the surrounding habitats to act as ex-situ sites and a winter bird survey conducted only in February and March. Additional evidence of, or emphasis on the unsuitability of the surrounding habitats needs to be provided to demonstrate that this is the main reason why there is unlikely to be any effects of SCI birds, or alternatively, demonstrate that there are more suitable ex-situ foraging sites between the development site and the SPAs. This would justify conducting a shortened/restricted winter bird survey."

Following the submission of the original planning application for this project on 12th July 2023 (LRD0006/S3), Mir...cer of State for Heritage and Electoral Reform Malcolm Noonan TD announced the designation of the North-West Irish Sea SPA on 13th July 2023¹. This has resulted in the project now having a direct pathway to a Natura 2000 site. As a result, the Appropriate Assessment Screening Report that accompanied the original application under Planning Ref. LRD0006/S3 was updated to include an assessment of the potential for significant effects on this new SPA. This has resulted in a full Natura Impact Statement (NIS) being prepared to accompany the RFI submission.

In light of the RFI submission a refusal for the proposed development was given. The grounds for refusal included the following statement:

"Following the submission of Additional Information, the Planning Authority is satisfied that no significant effects to the Qualifying Interest of any Designated Sites are likely to occur as a result of hydrological links to any downstream receptors.

Fingal County Council, following the precautionary principal, are not however satisfied that sufficient scientific evidence has been provided to demonstrate that the development site is not an ex-situ feeding area of significant importance by any Qualifying Interests. In the absence of scientific data in the NIS to support assumptions that the lands are not suitable for SCI of any Designated Sites, robust bird survey data would be required.

While the habitat and bird surveys that were undertaken did provide data on the habitats present and the use of the site by certain birds. the NIS failed to outline how this data indicated that the permanent loss or this site would not have potential to significantly affect any Qualifying Interests.

In light of their Conservation Objectives. There Is no specific mention or reference to which bird species identified are listed as SCIs of the North-West Irish Sea SPA or any other SPA, or assessment as to what extent they may be dependent on the habitats present within the site.

No assessment was carried out to determine If there Is suitable alternative habitat in the surrounding areas which can accommodate displaced birds. This is considered lacunae in the submitted NIS, which Is not acceptable in accordance with the guidelines on Appropriate Assessment. Further Information regarding SCI bird species outlined above would be required to remove any scientific doubt from this determination and enable such effects to be excluded.

Accordingly. Planning Authority considers that insufficient Information is available to enable it to make a full determination as the whether the proposed development Individually, or In combination. with other plans or projects would not adversely affect the Integrity of nearby European Sites or their qualifying species.

As per Section 177V of the Planning and Development Act 2000, as amended. a competent authority shall give consent for proposed development only after having determined that the proposed development shall not adversely affect the integrity of a European site. As the Planning Authority cannot conclude this, it is precluded from granting permission."

The AA Screening and NIS has been updated as part of this appeal to include the full wintering bird survey data 2023/2024. These surveys were completed by the ornithologist Joseph Adamson MCIEEM, since the RFI submission. These surveys are of fundamental importance to this submission and clearly demonstrate the site is not an ex-situ site for the qualifying interests of nearby SPA's. The updated NIS includes proposed mitigation and examines whether the project, either alone, or in combination with other plans and projects, in the view of best scientific knowledge available and in view of the relevant European site's conservation objectives, will adversely affect the integrity of the nearby SPA's including the North-West Irish Sea SPA.

Altemar Ltd.

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

¹ https://www.npws.ie/news/minister-noonan-announces-irelands-largest-protected-area-birds

authorities, EC projects and State/semi-State Departments. Bryan Deegan is the managing director of Altemar. Bryan, is an environmental scientist and marine biologist with 28 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture). Bryan Deegan carried out all elements of this Appropriate Assessment Screening.

Background to the Appropriate Assessment

The Habitats Directive 92/43/EEC (together with the Birds Directive (2009/1477/EC)) forms the cornerstone of Europe's nature conservation policy. The Directive protects over 1000 animals and plant species and over 200 "habitat types" which are of European importance. In the Habitats Directive, Articles 3 to 9 provide the legislative means to protect habitats and species of European Community interest through the establishment and conservation of an EU-wide network of conservation sites (NATURA, 2000). These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive), Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

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

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

As outlined in the EC guidance document on Article 6(4) (January 2007)2:

"Appropriate assessments of the implications of the plan or project for the site concerned must precede its approval and take into account the cumulative effects which result from the combination of that plan or project with other plans or projects in view of the site's conservation objectives. This implies that all aspects of the plan or project which can, either individually or in combination with other plans or projects, affect those objectives must be identified in the light of the best scientific knowledge in the field.

Assessment procedures of plans or projects likely to affect European sites should guarantee full consideration of all elements contributing to the site integrity and to the overall coherence of the network, both in the definition of the baseline conditions and in the stages leading to identification of potential impacts, mitigation measures and residual impacts. These determine what has to be compensated, both in quality and quantity. Regardless of whether the provisions of Article 6(3) are delivered following existing environmental impact assessment procedures or other specific methods, it must be ensured that:

- Article 6(3) assessment results allow full traceability of the decisions eventually made, including the selection of alternatives and any imperative reasons of overriding public interest.
- The assessment should include all elements contributing to the site's integrity and to the overall coherence of the network as defined in the site's conservation objectives and Standard

² European Commission. (2007).Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission:

Data Form, and be based on best available scientific knowledge in the field. The information required should be updated and could include the following issues:

- Structure and function, and the respective role of the site's ecological assets;
- Area, representativity and conservation status of the priority and nonpriority habitats in the site;
- Population size, degree of isolation, ecotype, genetic pool, age class structure, and conservation status of species under Annex II of the Habitats Directive or Annex I of the Birds Directive present in the site;
- Role of the site within the biographical region and in the coherence of the European network; and,
- Any other ecological assets and functions identified in the site.
- It should include a comprehensive identification of all the potential impacts of the plan or project likely to be significant on the site, taking into account cumulative impacts and other impacts likely to arise as a result of the combined action of the plan or project under assessment and other plans or projects.
- The assessment under Article 6(3) applies the best available techniques and methods, to estimate the extent of the effects of the plan or project on the biological integrity of the site(s) likely to be damaged.
- The assessment provides for the incorporation of the most effective mitigation measures into the plan or project concerned, in order to avoid, reduce or even cancel the negative impacts on the site.
- The characterisation of the biological integrity and the impact assessment should be based on the best possible indicators specific to the European assets which must also be useful to monitor the plan or project implementation."

Stres of the Appropriate Assessment

This Appropriate Assessment screening was undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001), Part XAB of the Planning and Development Act 2000, as amended, in addition to the December 2009 publication from the Department of Environment, Heritage and Local Government; 'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities' and the European Communities (Birds and Natural Habitats) Regulations 2011. In order to comply with the above Guidelines and legislation, the Appropriate Assessment process must be structured as follows:

1) Screening stage:

- Description of plan or project, and local site or plan area characteristics;
- Identification of relevant European sites, and compilation of information on their qualifying interests and conservation objectives
- Identification and description of individual in combination effects likely to result from the proposed project;
- Assessment of the likely significance of the effects identified above. Exclusion of sites where it can be objectively concluded that there will be no likely significant effects; and, Conclusions

2) Appropriate Assessment (Natura Impact Statement):

- Description of the European sites that will be considered further;
- Identification and description of potential adverse impacts on the conservation objectives of these sites likely to occur from the project or plan; and,
- Mitigation Measures that will be implemented to avoid, reduce or remedy any such potential adverse impacts
- Assessment as to whether, following the implementation of the proposed mitigation measures, it can be concluded, beyond all reasonable scientific doubt, that there will be no adverse impact on the integrity of the relevant European Site in light of its conservation objectives"
- Conclusions.

If it can be demonstrated during the AA screening phase (Stage 1), that the proposed project will not have a significant effect, whether alone or in combination with other plans or projects, on the conservation objectives of a European site, then no further AA (Stage 2) will be required. It is important to note that there is a requirement to apply a precautionary approach to AA screening. Therefore, where effects are possible, certain or unknown at the screening stage, AA will be required.

In addition, it should be noted that Article 6(3) of the Habitats Directive must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an AA of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.

Sty e 1 Screening Assessment

Management of the Site

The project is not directly connected with, or necessary to, the management of European sites.

Description of the Proposed Project

A ten-year permission for a Large-scale Residential Development (LRD) at this site at Lands off Flemington Lane, Balbriggan, Co. Dublin.

The proposed development will consist of the following:

- (i) the construction of 564 no. dwelling units, consisting of 378 no. houses; (127 no. two bedroom houses; 237 no. three-bedroom houses and 14 no. four-bedroom houses), 84 no. duplex units (22 no. one-bedroom duplexes, 36 no. two-bedroom duplexes and 26 no. three-bedroom duplexes) and 102 no. apartments (35 no. one bedroom apartments and 67 no two-bedroom apartments) as follows:
 - Hampton Park South containing a total of 103 no. dwelling units, consisting of 71 no. houses (16no. two-bedroom houses and 55 no. three-bedroom houses), 18 no. duplex units (5 no. one-bedroom duplexes; 9 no. two-bedroom duplexes and 4 no. three-bedroom duplex) and 14 no. apartments (6 no. 1 bed units; 8 no. 2 bed units)
 - Hampton Park Central containing a total of 142 no. dwelling units, consisting of 88 no. houses (36 no. two bedroom houses and 52 no. three-bedroom houses), 18 no. duplex units (2 no. one-bedroom duplexes, 9 no. two-bedroom duplexes and 7 no. three-bedroom duplexes) and 36 no. apartments (17no. 1 bed units and 19 no. 2 bed units) and 1 no. 379sqm childcare facility
 - Tanne's Lane containing a total of 54 no. dwelling units, consisting of 36 no. houses (6 no. two bedroom houses and 30 no. three-bedroom houses), 12 no. duplex units (1no. one-bedroom duplex, 6 no. two-bedroom duplexes and 5 no. three-bedroom duplexes) and 6 no. apartments (6 no. 2 bed units)
 - Hampton Park North containing a total of 128 no. dwelling units, consisting of 84 no. houses (28 no. two bedroom houses and 56 no. three-bedroom houses), 24 no. duplex units (7 no. one-bedroom duplexes; 9 two-bedroom duplexes and 8 no. three- bedroom duplexes) and 20 no. apartments (6 no. 1 bed units and 14 no. 2 bed units) and 1 no. 494.6 sqm childcare facility
 - Flemington Park containing a total of 137 no. dwelling units, consisting of 99 no. houses (41 no. two bedroom houses; 44 no. three-bedroom houses and 14 no. four- bedroom houses), 12 no. duplex units (7 no. one-bedroom duplexes, 3 no. two- bedroom duplexes and 2 no. three-bedroom duplexes) and 26 no. apartments (6 no. 1 bed units and 20 no. 2 bed units) and 1 no. 379sqm childcare facility

All ground floor apartments have private terraces; all upper-level apartments have private balconies and all houses have private rear gardens.

- (ii) the construction of 9 no. commercial units (totalling 574.4 sq.m.) and 6 No. communal units (totalling 329.5 sqm) in Hampton Park South, Hampton Park Central, Hampton Park North and Flemington Park.
- (iii) the introduction of a primary vehicular/pedestrian entrance from the southeast (upgrade of existing access from Boulevard Road), the construction of a secondary access route from the east (access from Hamlet Lane) and the construction of 5 no. tertiary access routes (access from Flemington Park, Hastings Avenue, Hastings Drive, Hastings Lawn and Taylor Hill Gardens).
- (iv) A total of 927 no. car parking spaces are proposed, this includes 811 no. resident parking spaces, 89 no. visitor spaces, 11 no. disabled parking spaces (numbers include 185 no. EV points) 7 no. spaces allocated to creche parking and 9 set down spaces. A total of 2,014 no. bicycle spaces are proposed, this includes 1326 no. resident bicycle spaces, 640 no. visitor spaces and 48 no. spaces allocated to creche bicycle parking. Planning permission is also sought for landscaping and infrastructural works, foul and surface water drainage, bin storage, 2 no. ESB substations, open space areas including playground, boundary treatments, internal roads and footpaths and all associated site works to facilitate the development. An Environmental Impact Assessment Report (EIAR, formerly known as an EIS) accompanies the application.

The proposed site outline, site location, and site layout plan are demonstrated in Figures 1-3.



Figure 1. Proposed site outline and location



Project: Residential Development Location: Balbriggan, Co. Dublin Date: 25th October 2023 Drawn By: Bryan Deegan (Altemar) ALTEMAR

Marine & Environmental Consultancy







Figure 3. Site layout plan - overall

Landscape

The __ndscape design for the proposed development has been prepared by IS Design to accompany this planning application. The proposed landscape plan (sheets 1-8) is demonstrated in Figures 4a-4h.

Drainage

An Engineering Services Design Report has been prepared by MPA Consulting Engineers to accompany this planning application. This report outlines the following foul and surface water drainage strategy for the proposed development.

Foul Water Drainage

In relation to foul infrastructure, this report outlines the following:

'Surrounding the site there is considerable wastewater infrastructure consisting of 225mm, 300mm and 375mm diameter sewers all of which connect to the Balbriggan / Skerries Wastewater Treatment plant.

There will be 6 no. connections to the existing wastewater infrastructure as detailed on drawing 191004/C/007. There will be a need to upgrade a short length of 150mm dia pipe in the adjacent Taylorshill development to 225mm dia pipe to comply with the requirements of IW, this is detailed on drawing 191004/C/007.4 attached and a letter of consent is provided with the planning submission.'

Based on the 2021 Environmental Report³ the Barnageeragh WWTP is operating within capacity has a remaining capacity of 28,050 (Person Equivalents).

Storm Water Drainage

In relation to storm water drainage, this report outlines the following:

'Surrounding the site there is considerable storm water infrastructure consisting of 225mm, 300mm, 450mm and 600mm diameter sewers all of which connect to the arterial drainage network, which ultimately discharges to the Bremore stream and the Irish sea.

The main storm water infrastructure in the area is the 600mm diameter storm sewer which has been laid as part of the Boulevard Road development as approved by F07A/1249 & F08A/1329.

There will be 5 no. connections to the storm water infrastructure as detailed on drawing 191004/C/008.0.'

Further, in relation to the proposed SuDS measures implemented into the proposed storm water drainage design, this report outlines the following:

'A combination of suitable SuDS components will be used on the site, namely, permeable paving, integrated tree pits, urban trees, grass lined swales, rain gardens, infiltration planters and gravel filled pits and basins for stormwater infiltration and attenuation.

Where possible storm water from roofs, roads and hardstandings will be collected at source and directed to these SUDs based infiltration systems. These systems are interconnected with land drains which will overflow to the formal pipes drainage system.

A combination of systems is proposed in order to take advantage of their respective benefits and incorporate them into the drainage system for the whole site.

Due to the site design and layout and topography the use of dry detention basins in the green areas is not feasible for all sub-catchments, as such underground attenuation system are proposed for what will be the privately managed areas of the proposed development, these will be fully engineered systems, with isolator rows and eccentric header pipes for silt management and removal.

In all other sub-catchments, in the areas to be taken in charge, the storm water attenuation consist of gravel filled beds under grass lined basins. In these cases the gravel filled beds are design to cater for the 1:30 year storm event with the basins only being filled in the extreme 1:100 year event. Side slopes will be max 1:5 for maintenance and grass cutting.

It is proposed that the main infrastructure on site, i.e. roads and concrete footpaths shall where feasible be drained through lateral inlet kerb gullies into grass lined swales formed in the roadside verges or in the adjacent green spaces, where this is not feasible the roads will be provided with a formal gulley and pipe gravity sewer system discharging to the gravel beds and attenuation basins within the curtilage of the site.

https://www.water.ie/docs/aers/2021/D0023-01 2021 AER.pdf

The storm drainage system for the proposed dwellings consists of permeable paving to the front of the dwellings as 'I as infiltration planters which shall cater for all roofed and paved areas within the individual sites. The excess stormwater from these systems will connect indirectly via overflows / land drains to the formal stormwater network located within the road network.

The storm water flow from the attenuation systems will be controlled by means of hydrobrake flow control devices which will have a maximum outflow equivalent to the green field run off.

The storm sewer system has been designed using Causeway Technologies – Flow design software to create a detailed model of the entire site.'

It should be noted that the proposed SuDS measures are to be implemented into the drainage design as best practice to manage stormwater locally, to mimic natural drainage and infiltration and to prevent flooding. SuDS measures are not included or designed solely as a means to prevent silt and pollutants discharging to local watercourses. These standard compliance measures would be in place whether or not watercourses or designated sites were or were not in the vicinity of the proposed development. The proposed foul drainage layout, storm water drainage layout, and SuDS layout are demonstrated in Figures 5-7.

Site Specific Flood Risk Assessment

A Flood Risk Assessment has been prepared by MPA Consulting Engineers to accompany this planning application. This report concludes with the following:

'In conclusion the proposed site is located in Zone C area and is therefore suitable for development for vulnerable uses which include dwelling houses.

It is clear from both the Stage 1 - Flood Risk Identification and the Stage 2 - Initial Flood Risk Assessment that the site is Zone C and is not at risk of flooding and there is no requirement to carry out any Stage 3 Detailed Flood Risk Assessments.

The proposed sites have been designed with SuDS based drainage systems in accordance with the GDSDS and adequate free board and flood routing is provided for the proposed dwellings to ensure that there is no flood risk from the urban drainage systems which are connected to the arterial drainage network and carry surface water away from the development to the Bremore Stream.'

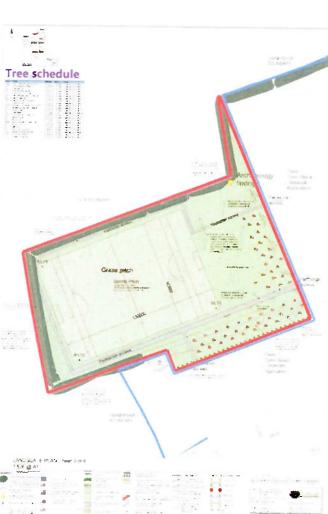
Wintering Birds

As outlined in Appendix I a wintering bird assessment was carried out (January to March 2023). As outlined in Appendix I "Birds observed at the Flemington Lane site are typical of the habitats present. The species assemblage is a reflection of the agricultural fields, hedgerows and overgrown waste ground habitats within and around the site and the birds observed are typical of birds occurring in these habitats in North County Dublin in Winter." In relation, to yellowhammer (redlisted) as outlined in Appendix 5.2 "A single individual was flushed from one of the OSR fields on the 18th March. A male and female was observed on the 21st of March. A scarce bird in Ireland, but can be quite frequently observed in parts of North County Dublin and Meath."

As outlined in Appendix 1b a full wintering bird survey for the 2023/2024 season have been carried out on site. This has included two surveys per month from October 2023 to March 2024, by the ornithologist Joseph Adamson MCIEEM. No significant numbers of wintering birds from neighbouring Natura 2000 sites have been noted on site. As noted in Appendix 1b "Birds observed at the Flemington Lane site are typical of the habitats present. The species assemblage is a reflection of the agricultural fields, hedgerows and overgrown waste ground habitats within and around the site and the birds observed are typical of birds occurring in these habitats in North County Dublin in Winter.

The agricultural grassland fields to the west of the site within the boundary of the water treatment plant were devoid of birds for the most part, with the exception of birds observed flying overhead and occasional foraging rooks when the fields were saturated due to frequent rain events." It is also important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for wintering birds for proximate SPAs.





Figures 4a-4d. Proposed landscape plan (Sheets 1-4)







Figures 4e-4h. Proposed landscape plan (Sheets 1-4)

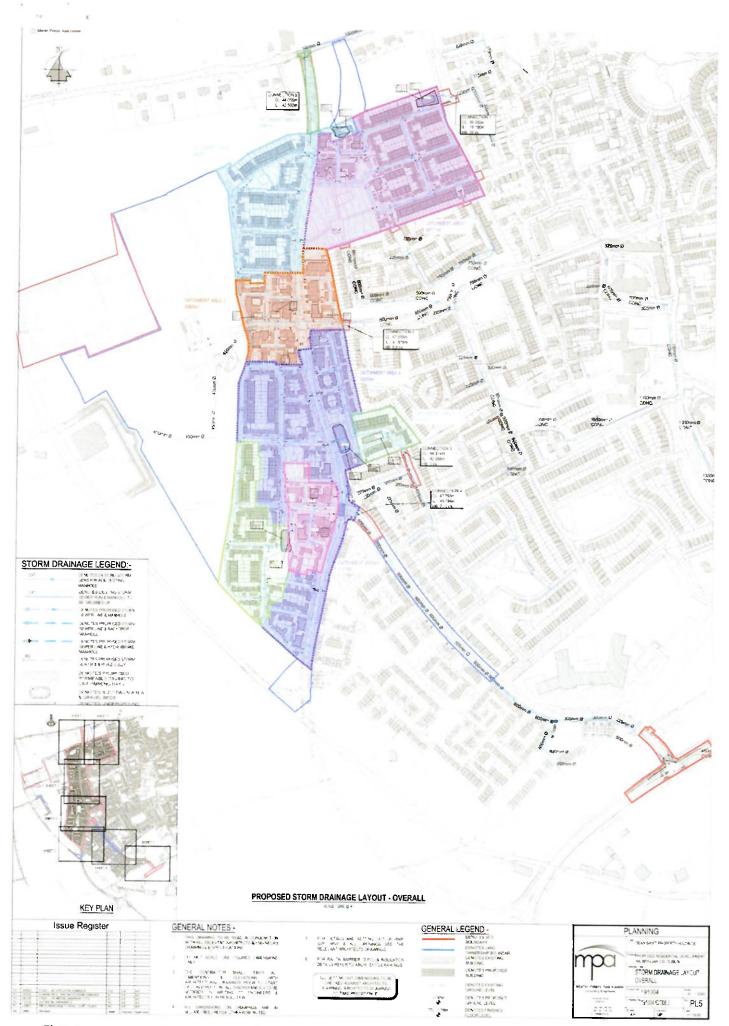


Figure 5. Proposed storm drainage layout



Figure 6. Proposed foul drainage layout

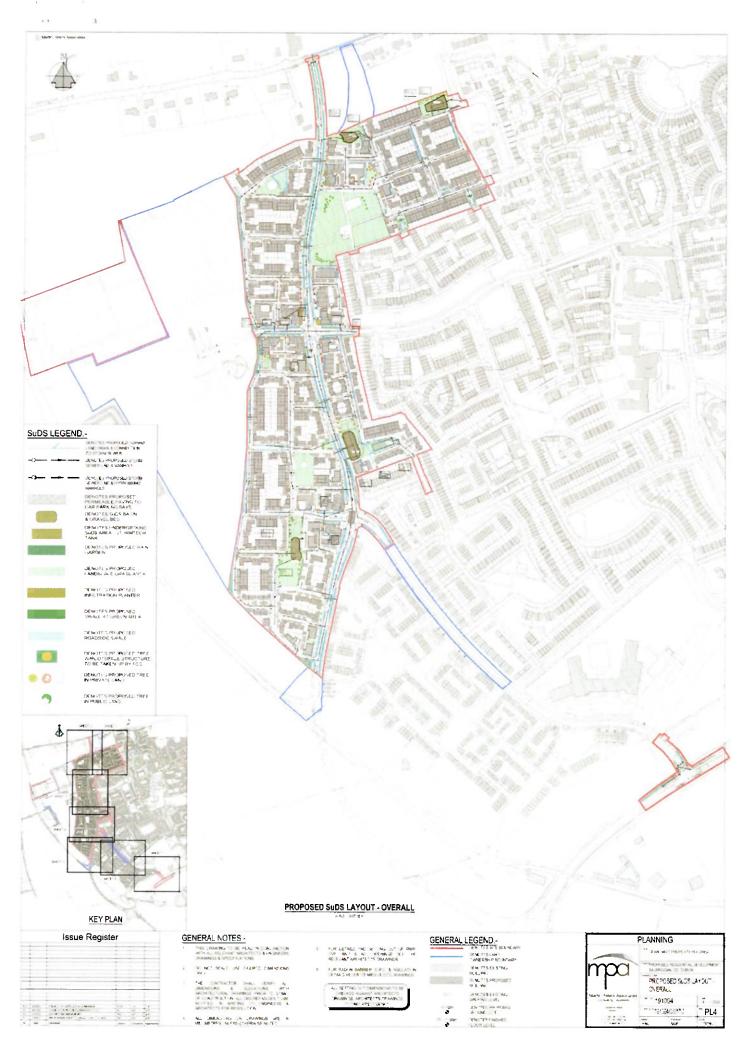


Figure 7. Proposed SuDS layout - overall

Identification of Relevant European Sites

The planning Regulator "Appropriate Assessment Screening for Development Management" (March 2021) "The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source- Pathway-Receptor framework and not by arbitrary distances (such as 15 km)."

The proposed development site is primarily a greenfield site consisting of arable land located within a suburban/agricultural environment at Balbriggan, Co. Dublin. The nearest European site is the North-West Irish Sea SPA (1.5 km) (Figure 9). The nearest waterbody to the subject site is Bremore Stream (Figure 10), a watercourse that ultimately outfalls to the marine environment at the Irish Sea to the east of the site. After consultation with Martin Peters Associates Consulting Engineers, it was outlined that, after attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. Foul wastewater drainage will ultimately be discharged to an existing foul drainage network. Foul wastewater will be treated along this network at the Balbriggan/Skerries Wastewater Treatment Plant which has capacity and is compliant. As a result, it is considered that there is an indirect hydrological connection to proximate Natura 2000 sites located within the marine environment via the proposed foul water drainage strategy.

Given the scale of the proposed development, the distance between the subject site to the nearest Natura 2000 Site (1.5 km to the North-West Irish Sea SPA) and the fact that the storm water drainage ultimately discharges to the Bremore Stream via the arterial drainage network currently servicing the existing housing estate to the east of the site, and that works are proximate to the stream (Figure 10) that leads to the North West Irish Sea SPA, it is, therefore, considered that the ZOI of the proposed project includes the site outline, the Bremore Stream and North-West Irish Sea SPA. In the absence of mitigation, there is the potential for dust, pollutants, and contaminated surface water runoff to enter the Bremore Stream during construction (via excavation, soil-stripping, transportation, demolition, and building works) with the potential for downstream impacts on the North-West Irish Sea SPA. No significant effects on any other European Sites are likely via this hydrological pathway. Any silt or pollutants that may enter this network will settle, be dispersed, or diluted within the surface water drainage network, watercourse network, and marine environment.

In the interest of carrying out a thorough assessment in line with both the Habitats Directive, and the precautionary principle, the area of assessment was expanded beyond the ZoI to include designated sites within 15km of the proposed development site, and sites beyond 15km with the potential for a hydrological connection. This was done in the interest of ensuring that any pathways, however indirect or remote, were taken into account. All European sites within 15km are listed in Table 1. The qualifying interests, and the potential impact of the proposed development on each European site and qualifying interest, are screened out in Table 2. The SACs and SPAs within 15km of the works site are demonstrated in Figures 8 and 9. Waterbodies and European sites located proximate to the proposed development are demonstrated in Figures 10 – 12.

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Natura 2000 Site	Distance	Direct Hydrological / Biodiversity Connection
Special Areas of Conservation (SAC)		
Rockabill to Dalkey Islands SAC	9.2 km	No '
Boyne Coast and Estuary SAC	9.6 km	No ·
Rogerstown Estuary SAC	11.3 km	No
River Boyne And River Blackwater SAC	13 km	No
Malahide Estuary SAC	14.8 km	No
Special Protection Areas (SPA)	Darfe III	
North-West Irish Sea SPA	1.5 km	Yes
River Nanny Estuary and Shore SPA	3.7 km	No
Skerries Islands SPA	7.6 km	No
Rockabill SPA	9.7 km	No
Rogerstown Estuary SPA	11.3 km	No
Boyne Estuary SPA	11.6 km	No
Malahide Estuary SPA	14.8 km	No

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European	Name	Screened	Details/Reason
Site Code	of Conservation	IN/OUT	
IE003000	Rockabill to Dalkey Island SAC	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Reefs [1170] Phocoena phocoena (Harbour Porpoise) [1351] Potential Impact The proposed development is located over 9.2km from the SAC. There is no direct pathway to this SAC. There is a weak indirect hydrological pathway to this SAC. Four wastewater will be treated along the existing public four infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SAC (9.2 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment. No likely significant effects on the qualifying interests of this SAC are foreseen via the weak indirect pathways of foul and surface water drainage. No potential impact is foreseen. There is no direct pathway from this
			site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site.
IE001957	Boyne Coast	OUT	No significant effects are likely. Conservation Objectives
	IE001957 Boyne Coast and Estuary SAC		The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Potential Impact

European Site Tele	Name	Screened IN/OUT	Details/Reason
			The proposed development is located over 9.6 km from the SAC. There is no direct pathway to this SAC.
			There is a weak indirect hydrological pathway to this SAC. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SAC (9.6 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment. No likely significant effects on the qualifying interests of this SAC are foreseen via the weak indirect pathways of foul and surface water drainage. No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site.
			No significant effects are likely.
IE000208	Rogerstown Estuary SAC	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
			Potential Impact
			The proposed development is located over 11.3 km from the SAC. There is no direct pathway to this SAC.
			There is a weak indirect hydrological pathway to this SAC. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SAC (11.3 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment.

European Site Code	Name	Screened IN/OUT	Details/Reason
			No likely significant effects on the qualifying interests of this SAC are foreseen via the weak indirect pathways of foul and surface water drainage.
			No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site.
IE002299	River Boyne and River Blackwater SAC	OUT	No significant effects are likely. Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Alkaline fens [7230] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0]
			Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]
			Potential Impact
			The proposed development is located over 13 km from the SAC. There is no direct pathway to this SAC.
			There is a weak indirect hydrological pathway to this SAC. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SAC (13 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment. No likely significant effects on the qualifying interests of this SAC are foreseen via the weak indirect pathways of foul and surface water drainage.
			No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site.
15000000			No significant effects are likely.
IE000205	Malahide Estuary SAC		Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310]

European	Name	Screened	Details/Reason
Site Code		IN/OUT	
			Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] Mediterranean salt meadows (Juncetalia maritimi) [1410] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
			Potential Impact The proposed development is located over 14.8 km from the SAC There is no direct pathway to this SAC.
			Given the distance to this SAC (14.8 km) across a substantial marine environment, it is considered that there is no direct or indirect hydrological pathway to this SAC. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the minimum distance to this SAC (14.8 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment. No likely significant effects on the qualifying interests of this SAC are foreseen via the weak indirect pathways of foul and surface water drainage.
			proposed development will not impact on the conservation interests of the site.
			No significant effects are likely.
Special Protect			
IE004236	North-West Irish Sea SPA		Conservation Objectives The maintenance of habitats and species within European sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Red-throated Diver (Gavia stellata) [A001] Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Common Scoter (Melanitta nigra) [A065] Little Gull (Larus minutus) [A177] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184]
		H	esser Black-backed Gull (<i>Larus fuscus</i>) [A183] Herring Gull (<i>Larus argentatus</i>) [A184] Great Black-backed Gull (<i>Larus marinus</i>) [A187] Kittiwake (<i>Rissa tridactyla</i>) [A188]

European N Site Code	creened N/OUT	Details/Reason
The state of the s	N/OUT	Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna paradisaea) [A194] Little Tern (Sterna abifrons) [A195] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204] Potential Impact The development site is located within a suburban area approximately 1.5km from this SPA. There is a direct hydrological pathway from the proposed development to this SPA. Given that the storm water drainage ultimately discharges to the Bremore Stream via the arterial drainage network currently servicing the existing housing estate to the east of the site and that works are proximate to the stream (Figure 10) that leads to the North West Irish Sea SPA, there is potential for contaminated surface water and pollutants to enter this SPA via direct and indirect pathways. There is an indirect hydrological pathway from the proposed development site to this SPA via foul water drainage. Foul wastewater will be treated along the existing public foul infrastructure. In the absence of mitigation, no significant effects on the qualifying interests of this SPA relikely via the indirect hydrological pathway of foul wastewater drainage. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. Given the scale of the proposed development, the nature of the proposed works, the proximity of the subject site to the Bremore Stream, and the fact that the North-West Irish Sea SPA is located immediately downstream of the site via the Bremore Stream (Figure 12), it is considered that, in the absence of mitigation, there is the potential for silt and contaminated surface water runoff to enter the Bremore Stream (via existing public surface water networks) with the potential for downstream impacts on this SPA. Out of an abundance of caution, mitigation measures are required to protect this SPA from significant eff
		the proposed development, the nature of the proposed works, the proximity of the subject site to the Bremore Stream, and the fact that the North-West Irish Sea SPA is located immediately downstream of the site via the Bremore Stream (Figure 12), it is considered that, in the absence of mitigation, there is the potential for silt and contaminated surface water runoff to enter the Bremore Stream (via existing public surface water networks) with the potential for downstream impacts on this SPA. Out of an abundance of caution mitigation measures are required to protect this SPA from significant effects. The habitats on site are not suitable to form an ex-situ site for birds from surrounding SPA's. A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and

European Site Code	Name	Screened IN/OUT	Details/Reason
			species that are Qualifying Interests of this SPA are truly marine associated bird species and would not be associated with the terrestrial habitats on site.
			Given the minimum distance to this SPA (1.5 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen. In the absence of mitigation measures, no significant impacts on this SPA are likely.
			Out of an abundance of caution, and in the absence of mitigation measures, it is considered that significant effects on the qualifying interests of this SPA are likely via the direct (due to proximity of works) and indirect hydrological pathway to the Bremore Stream (surface water discharge to existing housing estate to the east of the site, which in turn outfalls to the marine environment via the Bremore Stream).
			Stage 2 AA (Natura Impact Statement) is required.
IE004158	River Nanny Estuary and Shore SPA	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Golden Plover (Pluvialis apricaria) [A140] Knot (Calidris canutus) [A143] Sanderling (Calidris alba) [A144] Herring Gull (Larus argentatus) [A184] Wetland and Waterbirds [A999]
			Potential Impact
			The proposed development is located over 3.7 km from the SPA. There is no direct pathway to this SPA.
			There is a weak indirect hydrological pathway to this SPA. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SPA (3.7 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment. No likely significant effects on the qualifying interests of this SPA are foreseen via the weak indirect pathways of foul and surface water drainage.
			The habitats on site are not suitable to form an ex-situ site for birds from surrounding SPA's. A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site

European	Name	Screened	Details/Reason
Site Code		IN/OUT	throughout all of the wintering hind automated the control of the
			throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for wintering birds for proximate SPAs.
			Given the minimum distance to this SPA (3.7 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen. In the absence of mitigation measures, no significant impacts on this SPA are likely.
			No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site.
15004400	at the same		No significant effects are likely.
łE004122	Skerries Islands SPA	OUT	Conservation Objectives To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
-			Qualifying Interests Cormorant (Phalacrocorax carbo) [A017] Shag (Phalacrocorax aristotelis) [A018] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Purple Sandpiper (Calidris maritima) [A148] Turnstone (Arenaria interpres) [A169] Herring Gull (Larus argentatus) [A184]
			Potential Impact The proposed development is located over 7.6 km from the SPA. There is no direct pathway to this SPA.
			There is a weak indirect hydrological pathway to this SPA. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SPA (7.6 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment. No likely significant effects on the qualifying interests of this SPA are foreseen via the weak indirect pathways of foul and surface water drainage.
			The habitats on site are not suitable to form an ex-situ site for birds from surrounding SPA's. A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the

European Site Code	Name	Screened IN/OUT	Details/Reason
			maximum amount observed on site were "20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4 th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for wintering birds for proximate SPAs.
			Given the minimum distance to this SPA (7.6 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen. In the absence of mitigation measures, no significant impacts on this SPA are likely.
			No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site.
IE004014	Rockabill SPA	OUT	No significant effects are likely.
16004014	коскарііі ЗРА	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests Purple Sandpiper (Calidris maritima) [A148] Roseate Tern (Sterna dougallii) [A192] Common Tern (Sterna hirundo) [A193] Arctic Tern (Sterna paradisaea) [A194]
			Potential Impact
			The proposed development is located over 9.7 km from the SPA. There is no direct pathway to this SPA.
			There is a weak indirect hydrological pathway to this SPA. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SPA (9.7 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment. No likely significant effects on the qualifying interests of this SPA are foreseen via the weak indirect pathways of foul and surface water drainage.
			The habitats on site are not suitable to form an ex-situ site for birds from surrounding SPA's. A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and

European	Name	Screened	Details/Reason
Site Code		IN/OUT	
			occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for wintering birds for proximate SPAs. Tern species are piscivorous and would not be associated with the habitats on site.
			Given the minimum distance to this SPA (9.7 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen. In the absence of mitigation measures, no significant impacts on this SPA are likely.
			No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site.
			No significant effects are likely.
IE004015	Rogerstown Estuary SPA	OUT	Conservation Objectives To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
			To maintain or restore the favourable conservation condition of the wetland habitat at Lough Iron SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.
			Qualifying Interests Greylag Goose (Anser anser) [A043] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Shoveler (Anas clypeata) [A056] Oystercatcher (Haematopus ostralegus) [A130] Ringed Plover (Charadrius hiaticula) [A137] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]
			Potential Impact
			The proposed development is located over 11.3 km from the SPA. There is no direct pathway to this SPA.
			There is a weak indirect hydrological pathway to this SPA. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SPA (11.3 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment.

European Site Code	Name	Screened IN/OUT	Details/Reason
			No likely significant effects on the qualifying interests of this SPA are foreseen via the weak indirect pathways of foul and surface water drainage.
			The habitats on site are not suitable to form an ex-situ site for birds from surrounding SPA's. A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for wintering birds for proximate SPAs.
			Given the minimum distance to this SPA (11.3 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen. In the absence of mitigation measures, no significant impacts on this SPA are likely.
			No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site.
			No significant effects are likely.
IE004080	Boyne Estuary SPA	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Shelduck (Tadorna tadorna) [A048]
			Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Lapwing (Vanellus vanellus) [A142] Knot (Calidris canutus) [A143]
			Sanderling (Calidris alba) [A144] Black-tailed Godwit (Limosa limosa) [A156] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Little Tern (Sterna albifrons) [A195] Wetland and Waterbirds [A999]
			Potential Impact
			The proposed development is located over 11.6 km from the SPA. There is no direct pathway to this SPA.
			There is a weak indirect hydrological pathway to this SPA. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to

European	Name	Screened	Details/Reason
Site Code		IN/OUT	the Response Change and this state of the st
			the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the substantial distance to this SPA (11. km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (viexcavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment No likely significant effects on the qualifying interests of this SPA are foreseen via the weak indirect pathways of foul and surface water drainage.
			The habitats on site are not suitable to form an ex-situ site for birds from surrounding SPA's. A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for wintering birds for proximate SPAs.
			Given the minimum distance to this SPA (11.6 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen. In the absence of mitigation measures, no significant impacts on this SPA are likely.
			No potential impact is foreseen. There is no direct pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site.
			No significant effects are likely.
IE004025	Malahide Estuary SPA	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.
			Qualifying Interests Great Crested Grebe (Podiceps cristatus) [A005] Light-bellied Brent Goose (Branta bernicla hrota) [A046] Shelduck (Tadorna tadorna) [A048] Pintail (Anas acuta) [A054] Goldeneye (Bucephala clangula) [A067] Red-breasted Merganser (Mergus serrator) [A069] Oystercatcher (Haematopus ostralegus) [A130] Golden Plover (Pluvialis apricaria) [A140] Grey Plover (Pluvialis squatarola) [A141] Knot (Calidris canutus) [A143] Dunlin (Calidris alpina) [A149] Black-tailed Godwit (Limosa limosa) [A156] Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162]

416 94	The same of the sa	Screened	Details/Reason
European	Name	IN/OUT	Details/ reason
Site Code		111/001	Wetland and Waterbirds [A999]
			Potential Impact The proposed development site is located within a suburban / agricultural environment, 14.8 km from this SPA. There is no 'direct' or 'indirect' Source-Pathway linkage between the proposed development site and the SPA.
			Given the distance to this SPA (14.8 km) across a substantial marine environment, it is considered that there is no direct or indirect hydrological pathway to this SPA. Foul wastewater will be treated along the existing public foul infrastructure. After attenuation on-site, surface water drainage will be directed to the arterial drainage network currently servicing the existing housing estate to the east of the site, which in turn outfalls to the Bremore Stream and, ultimately, the marine environment. In the absence of mitigation, given the minimum distance to this SPA (14.8 km) across a marine environment, any silt or pollutants that may enter the surface water drainage network during construction (via excavation, soil-stripping, transportation, demolition, and building works) and operation will settle, be dispersed, or diluted within the drainage network, watercourse network, and marine environment. No likely significant effects on the qualifying interests of this SPA are foreseen via the weak indirect pathways of foul and surface water drainage.
			The habitats on site are not suitable to form an ex-situ site for birds from surrounding SPA's. A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for wintering birds for proximate SPAs.
			Given the minimum distance to this SPA (14.8 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen. In the absence of mitigation measures, no significant impacts on this SPA are likely.
			No potential impact is foreseen. There is no direct or indirect pathway from this site to the SPA. The construction and operation of the proposed development will not impact on the conservation interests of the site.
			No significant effects are likely.

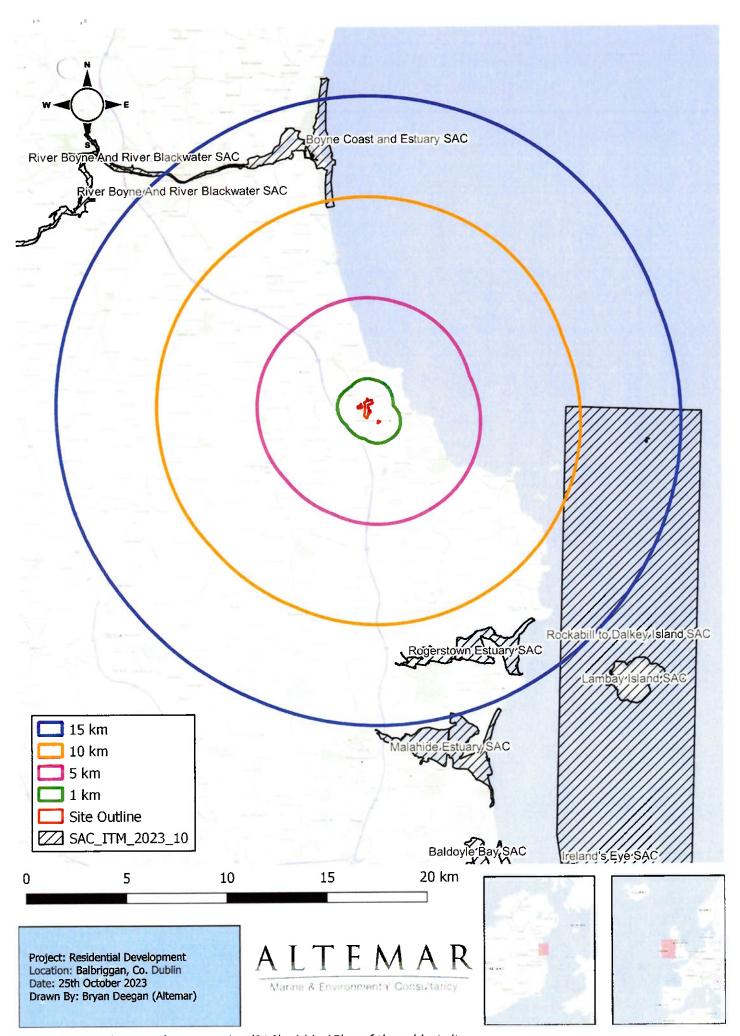


Figure 8. Special Areas of Conservation (SAC) within 15km of the subject site

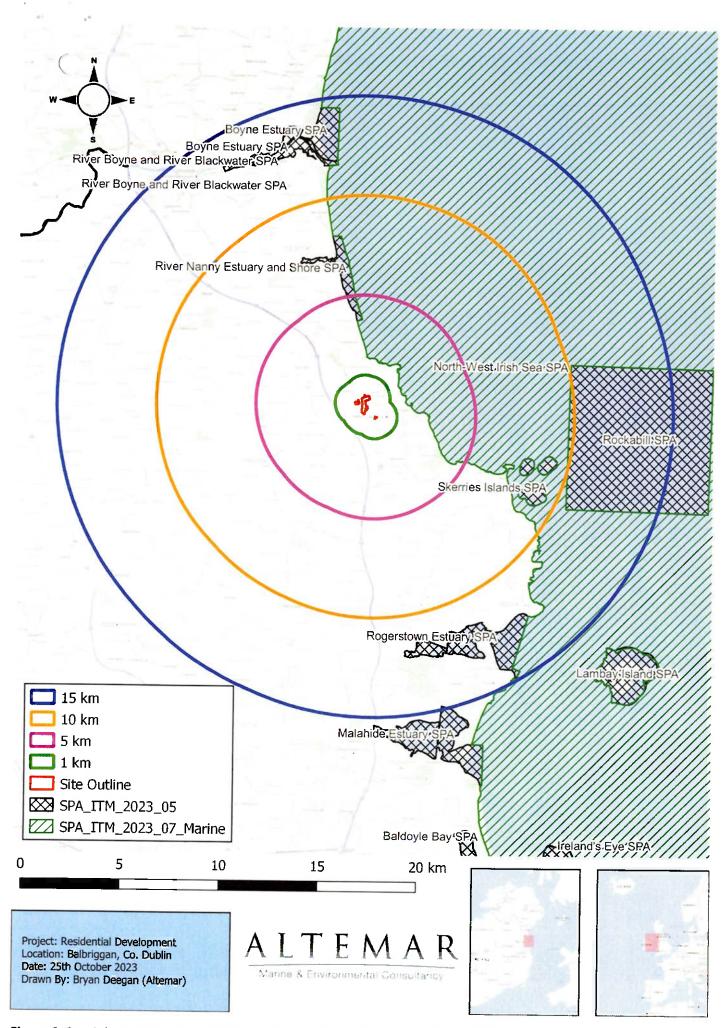


Figure 9. Special Protection Areas (SPA) and Marine SPAs within 15km of the subject site



Figure 10. Waterbodies within 1km of the subject site



Figure 11. Waterbodies and SACs located proximate to the subject site

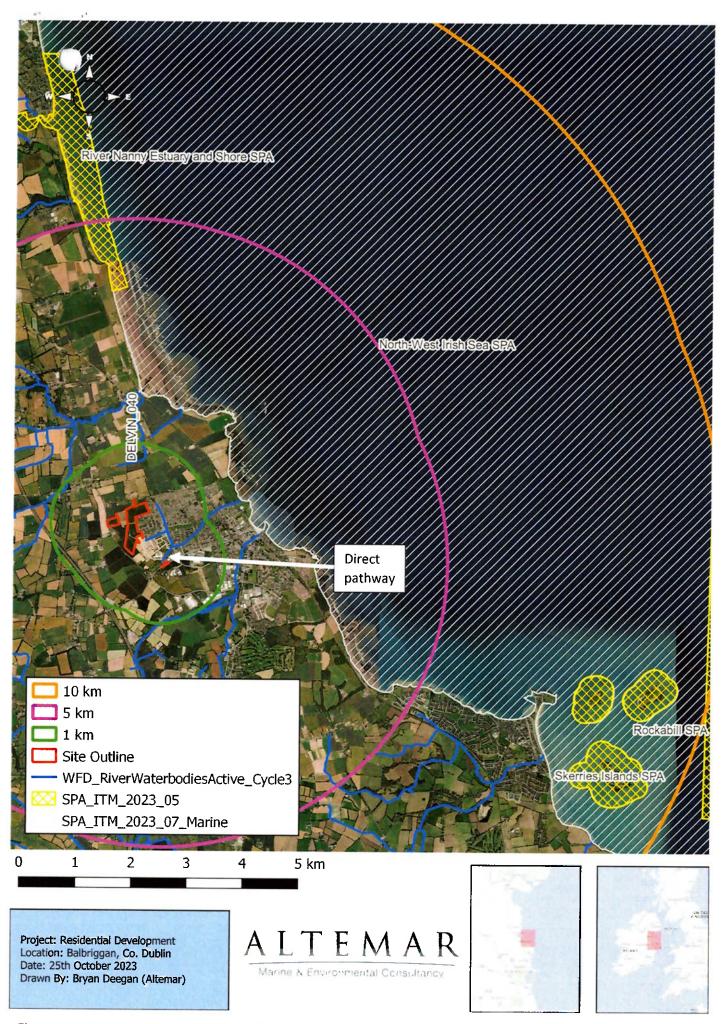


Figure 12. Waterbodies and SPAs located proximate to the subject site

In-Combination Effects

There are several development proposals located in the areas surrounding the subject site. The following is a list of ning application(s) as identified on the Department of Housing, Local Government and Heritage's 'National Planning Application Database' portal:

Table 3. In-combination effects considered

Ref. No.	Address	Proposal
F23A/0075	Bremore Pastures, Balbriggan, Co. Dublin	Permission for the construction of 4no. two storey terraced 3 bedroom dwellings, rear garden areas, boundary walls, connections to existing services and all associated site development works at Bremore Pastures, Balbriggan, County Dublin.
F22A/0670	(on lands of c. 6.29 ha.) relating to: 'Phase 3' to be known as 'Ladywell', within the townlands of, 'Clonard or Folkstown Great', 'Clogheder' & 'Flemingtown Balbriggan, Co. Dublin	The development will consist of Phase 3C as well as roads, services and public open space relating to the overall Phase 3 Ladywell lands as follows: A) 75 no. dwellings comprising 68 no. houses consisting of 22 no. 2 bedroom dwellings (House Types E1, E2, E4, E6, E7, E8, E9, G1, G2, G3, G4, G5], 41 no. 3 bedroom dwellings (House Types D1, D2, F1, F2, F3, F4, F4A, F5, F5A, N1, N2, N3], 2 no. 4 bedroom detached dwellings (house type M1] - all 2-storey), & 3 no. 5 bedroom detached dwellings [House Type K1 - 2.5 storeys - 3 floors), (in a mixture of semi-detached, terraced, end of terrace and detached units); all with associated private open space; B) 7 no. 1 bedroom apartment units consisting of 3 no. 1 bedroom triplex units (T1, T2, T3] in a 3-storey building, 4 no. 1 bedroom Maisonettes [Apartment Types P1 & P2] in 2 no. 2-storey buildings, (all with private open space); provision of single storey cycle parking; bin stores; and ESB substations, solar panels on roofs; as well as 238 no. surface car parking spaces;
		C) Public Open Space of c. 1.34 hectares (Phase 3C -c. 0.38 ha), (with additional 0.48 hectares of incidental open space) as well as communal (c. 0.06 ha) and private open space; all associated landscaping and drainage works (including attenuation] with public lighting, planting and boundary treatments, including regrading/reprofiling of site where required;
		D) Provision of Class 1 Public Open Space (c. 0.65 hectares), with play equipment (accessed from Hamlet Lane) located to the west of Bremore Pastures and Hastings Lawn, south of Flemington Lane, [proposal includes alterations to part of the Class 1 public park and associated works approved under Reg. Ref. F15A/0550];
		E) Provision of roads and services infrastructure (surface water, foul and water supply) to facilitate the development of the remainder of Phase 3 lands (Phases 3A, 3B & 3D) including public lighting, SuDS drainage and services infrastructure, as well as vehicular and pedestrian connections to the 'Boulevard Road' and all associated landscaping and ancillary site development works;
F22A/0526	Phase 3 to be known as 'Ladywell' within the townlands of Clonard or Folkstown Great, Clogheder & Flemington, Balbriggan, Co. Dublin	F) Signalised upgrade of the junction of Boulevard Road and the Clonard Road (R122) as well as pedestrian crossings along Boulevard Road; Development (on lands of c. 6.70 ha) relating to: 'Phase 3' to beknown as 'Ladywell' within the townlands of Clonard or Folkstown Great, Clogheder & Flemingtown, Balbriggan, Co Dublin. (Phase 3 lands bounded generally by undeveloped lands to the north, undeveloped lands to the south, Boulevard Road to the east, and undeveloped lands to the west (to the rear of local road L1130). The proposal includes a separate site of Class 1 Public open Space of c. 0.65 hectares in the adjoining townland of Flemington to the north (accessed from Hamlet Lane, Bremore Pastures Drive, Balbriggan). The development will consist of Phase 3B as well as roads, services and public space relating to the overall Phase 3 Ladywell lands as follows: A) 95 no. dwellings comprising 79 no. 2-storey houses consisting of 20 no 2 bedroom dwellings (House Types E1, E1A, E2, E4, E5, E6), 59 no. 3 bedroom dwellings (House Types D1, D1A, D2, D2A, F1, F1A, F2, F3, F4, F5, F6) all with associated private open space (in a mixture of semi-detached, terraced and detached units), 16 no. 1 bedroom Maisonettes

Ref. No.	Address	Proposal
		storey building, single storey cycle parking; bin stores; and ESB substations, solar panels on roofs; as well as 305 no. surface car parking spaces; B) Public Open Space of c. 1.34 hectares, (with additional 0.48 hectares of incidental open space along riparian corridor) as well as communal and private open space; all associated landscaping and drainage works (including attenuation) with public lighting, planting and boundary treatments, including regrading/re-profiling of site where required; C) Provision of Class 1 Public Open Space (c. 0.65 hectares), with play equipment (accessed from Hamlet Lane) located to the west of Bremore Pastures and Hastings Lawn, south of Flemington Lane, (proposal includes alterations to part of the Class 1 public park and associated works approved under Reg. Ref. F15A/0550); D) Provision of roads and services infrastructure (surface water, foul and water supply) to facilitate the development of the remainder of Phase 3 lands (Phases 3A, 3C & 3D) including public lighting, SuDS drainage and services infrastructure, as well as vehicular and pedestrian connections to the "Boulevard Road" and all associated landscaping and ancillary site development works; E) Signalised upgrade of the junction of Boulevard Road and the Clonard Road (R122) as well as pedestrian crossings along Boulevard Road;
F22A/0195	Flemington Lane, Bremore, Balbriggan, Co. Dublin, K32 RX37.	Demolish existing detached garage and single storey extension to rear of dwelling, construct new single storey extensions to side and rear, new detached garage, modify fenestration and entrance door arrangement to front elevation, relocate existing vehicular entrance, SuDS drainage and all associated site works.
F21A/0055	Phase 3 to be known as 'Ladywell' within the townlands of Clonard or Folkstown Great, Clogheder & Flemington, Balbriggan, Co. Dublin	The development will consist of Phase 3A as well as roads, services and public space relating to the overall Phase 3 Ladywell Masterplan lands as follows: A) 99 no. dwellings comprising 73 no. 2-storey houses consisting of 24 no. 2 bedroom dwellings [House Types B1, B2,B3, D1, D3, F1, F2, F3, F4, F5] & 5 no. 4 bedroom dwellings [House Types B1, B2,B3, D1, D3, F1, F2, F3, F4, F5] & 5 no. 4 bedroom dwellings [House Types M1 & M2]), all with private open space; 16 no. duplex apartments (8 no. 2 bedroom [Types X1, X3] and 8 no. 3 bedroom units [Types X2, X4) in a 3 storey duplex building (including terraces at first floor level, single storey refuse storage building and cycle parking); 6 no. 1 bedroom 'triplex' apartments [Types T1, T2, T3] with balconies at first and second storey levels in 2 no. 3 storey buildings along with a single storey bicycle store & 4 no. 1 bedroom 'maisonette' apartments in 2 no 2 storey buildings (Types P1 & P2]) & bin stores as well as 172 no. car parking spaces; B) Public Open Space of c. 1 hectare, (with additional 0.27 hectares of open space along riparian corridor) as well as communal and private open space; all associated landscaping and drainage works (including attenuation) with public lighting, planting and boundary treatments, including regrading/re-profiling of site (and ditches] where required; C) Provision of Class 1 Public Open Space (c. 0.65 hectares), with play equipment (accessed from Hamlet Lane) located to the west of Bremore Pastures and Hastings Lawn, south of Flemington Lane, (proposal includes alterations to part of the Class 1 public park and associated works approved under Reg. Ref. F15A/0550]; D) Provision of roads and services infrastructure (surface water, foul and water supply) to facilitate the future development of Phase 3 lands (Phases 3B-3D) including public lighting, Suds drainage and services infrastructure, as well as vehicular and pedestrian connections to the 'Boulevard Road' and all associated landscaping and ancillary site development works; E) Sig

Following an analysis of development proposals proximate to the subject site, it is considered that in combination effects with other existing and proposed developments in proximity to the application area would be unlikely, neutral, not significant and localised. It is concluded that no significant effects on Natura 2000 sites are likely as a result of the proposed development in combination with other projects. No in combination effects are foreseen.

No projects in the vicinity of the proposed development would be seen to have a significant in combination effect on Natura 2000 sites.

AA Screening Conclusions

An initial screening of the proposed works, using the precautionary principle (without the use of any mitigation measures) and the Source/Pathway/Receptor links between the proposed works and Natura 2000 sites with the potential to result in significant effects on the conservation objectives and qualifying interests of the Natura 2000 sites was carried out in Table 2. Based on best scientific knowledge and objective information and assessment, the possibility of significant effects caused by the proposed project was excluded for the following Natura 2000 sites:

Special Areas of Conservation

Rockabill to Dalkey Islands SAC Boyne Coast and Estuary SAC Rogerstown Estuary SAC River Boyne and River Blackwater SAC Malahide Estuary SAC

Special Protection Areas

River Nanny Estuary and Shore SPA Skerries Islands SPA Rockabill SPA Rogerstown Estuary SPA Boyne Estuary SPA Malahide Estuary SPA

The project is limited in scale and extent and the potential zone of influence is restricted to the immediate vicinity of the proposed development. However, in the absence of mitigation measures there is potential for silt laden material and contaminated surface water drainage to enter proximate public surface water networks, the Bremore Stream, and the North-West Irish Sea SPA located downstream of the works.

A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for qualifying interests of proximate SPAs including North-West Irish Sea SPA.

An NIS is required in respect of the effects of the project on North-West Irish Sea SPA because it cannot be excluded on the basis of best objective scientific information following screening, in the absence of control or mitigation measures in relation to pollution (silt, dust, pollution and runoff) during construction and operation, that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the named European Site/s.

An NIS or Stage 2 Appropriate Assessment is not required for the effects of the project on all other listed Natura 2000 sites above because it can be excluded on the basis of the best objective scientific information following screening that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the European Site/s.

NIS is required due to the potential for significant effects on the North-West Irish Sea SPA in the absence of mitigation.

Further Information on European Site Screened in for NIS

Nd --west Irish Sea SPA 004236

As outlined in the North-west Irish Sea Synopsis⁴ (NPWS, version date 17.7.2023)

"The North-west Irish Sea cSPA constitutes an important resource for marine birds. The estuaries and bays that open into it along with connecting coastal stretches of intertidal and shallow subtidal habitats, provide safe feeding and roosting habitats for waterbirds throughout the winter and migration periods. These areas, along with more pelagic marine waters further offshore, provide additional supporting habitats (for foraging and other maintenance behaviours) for those seabirds that breed at colonies on the north-west Irish Sea's islands and coastal headlands. These marine areas are also important for seabirds outside the breeding period.

This SPA extends offshore along the coasts of counties Louth, Meath and Dublin, and is approximately 2,333km2 in area. This SPA is ecologically connected to several existing SPAs in this area.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Common Scoter, Red-throated Diver, Great Northern Diver, Fulmar, Manx Shearwater, Shag, Cormorant, Little Gull, Kittiwake, Black-headed Gull, Common Gull, Lesser Black-backed Gull, Herring Gull, Great Black-backed Gull, Little Tern, Roseate Tern, Common Tern, Arctic Tern, Puffin, Razorbill and Guillemot.

The breeding seabird species listed for those SPAs, which abut the North-West Irish Sea SPA are: Fulmar (Lambay Island SPA); Cormorant (Skerries Island SPA; Ireland's Eye SPA; Lambay Island SPA); Shag (Skerries Island SPA; Lambay Island SPA); Lesser Black-backed Gull (Lambay Island SPA); Herring Gull (Skerries Island SPA; Ireland's Eye SPA; Lambay Island SPA); Kittiwake (Lambay Island SPA; Ireland's Eye SPA; Howth Head SPA); Roseate Tern (Rockabill SPA); Common Tern (Rockabill SPA); Arctic Tern (Rockabill SPA); Little Tern (Boyne Estuary SPA); Guillemot (Lambay Island SPA, Ireland's Eye SPA); Razorbill (Lambay Island SPA, Ireland's Eye SPA); and Puffin (Lambay Island SPA). The Common Tern population that is listed for the nearby South Dublin Bay and River Tolka Estuary SPA is also likely to use this SPA as a foraging resource.

Informed by two surveys of the western Irish Sea region in 2016 an estimated 120,232 and 34,626 individual marine birds occurred in this SPA during autumn and winter respectively. Those marine bird species whose estimated abundances equalled or exceeded 1% of the total estimated size of the winter assemblage are: Redthroated Diver (538), Fulmar (506), Little Gull (391), Kittiwake (944), Black-headed Gull (508), Common Gull (2,866), Herring Gull (6,893), Great Black-backed Gull (2,096), Razorbill (4,638) and Guillemot (13,914).

The estimated 2016 summer abundance of Manx Shearwater in the North West Irish Sea SPA is 13,010 and is of international importance. The estimated 2016 autumn and winter abundances of Great Northern Diver in the North West Irish Sea SPA is 248 and 230 respectively and are of international importance. The estimated abundances of Common Scoter over parts of this SPA can reach significant numbers (e.g. 14,567 in December 2018) which is also of international importance."

⁴ https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004236.pdf

**Conservation Objectives of North-west Irish Sea SPA 004236 (All Habitats and Species)

The qualifying interests, their attributes, targets and the potential impact of the proposed development on each of the features of interest of North-west Irish Sea SPA 004236 are seen in Table 4.

Table 4. The site-specific Conservation Objectives, overall status of species and habitats and the potential impact of the proposed works on the features of interest and conservation objectives of North-west Irish Sea SPA.

Annex Species/Habitats- Qualifying Interest	Overall Conservation Status	Site Specific Conservation Objectives, attributes, targets and perceived impacts.
Common Scoter (Melanitta nigra) [A065] Red-throated Diver (Gavia stellata) [A001] Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Cormorant (Phalacrocorax carbo) [A017] Little Tern (Sterna albifrons) [A195] Kittiwake (Rissa tridactyla) [A188] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Roseate Tern (Sterna dougallii) [A192] Arctic Tern (Sterna paradisaea) [A194] Puffin (Fratercula arctica) [A204] Razorbill (Alca torda) [A200] Guillemot (Uria aalge) [A199] Little Gull (Hydrocoloeus minutus) (A862) Common Tern (Sterna hirundo) (A193)	[A065] Red; [A001] Amber; [A003] Amber; [A009] Amber; [A013] Amber; [A017] Amber; [A195] Amber; [A188] Red; [A179] Amber; [A182] Amber; [A183] Amber; [A184] Amber; [A192] Amber; [A194] Amber; [A204] Red; [A200] Amber; [A199] Amber; [A199] Amber; [A199] Amber; [A199] Amber;	To maintain the favourable conservation condition of the qualifying interests in North-west Irish Sea SPA, which is defined by the following list of attributes and targets: (Attribute. Target) Population Size. Long term SPA population trend is stable or increasing Spatial Distribution. Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population Forage spatial distribution, extent, abundance and availability. Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target Disturbance across the site. The intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population size and spatial distribution. Barriers to connectivity. The number, location, shape and area of barriers do not significantly impact the site population's access to the SPA or other ecologically important sites outside the SPA. Potential Effect Given the nature of the works, all of these effects would be expected to be localised in nature restricted to the immediate vicinity of the site. However, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into the Bremore Stream via construction works with potential for downstream impacts on North-West Irish Sea SPA. The habitats of conservation interest of this SPA are not on site. However, the range of the species that are of conservational interest may be located downstream of the proposed works. Construction works have the potential for downstream impacts on aquatic biodiversity through the introduction of silt and petrochemicals. Existing drainage networks,

Annex Species/Habitats-	Overall Conservation Status	Site Specific Conservation Objectives, attributes, targets and perceived impacts.
		adjacent to the subject site could lead to dust, hazardous material, soil or silt laden runoff entering the Bremore Stream via drainage networks.
		Impacts on the SPA from upstream sources have the potential to directly impact on the qualifying interests of the SPA in the absence of mitigation measures. In the absence of mitigation measures there is the potential to impact on the distribution number and range of the following qualifying interests if significant quantities of silt and pollution were to enter the Bremore Stream:
		 Common Scoter (Melanitta nigra) [A065] Red-throated Diver (Gavia stellata) [A001] Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Cormorant (Phalacrocorax carbo) [A017] Little Tern (Sterna albifrons) [A195] Kittiwake (Rissa tridactyla) [A188] Black-headed Gull (Chroicocephalus ridibundus) [A179] Common Gull (Larus canus) [A182] Lesser Black-backed Gull (Larus fuscus) [A183] Herring Gull (Larus argentatus) [A184] Roseate Tern (Sterna dougallii) [A192] Arctic Tern (Sterna paradisaea) [A194] Puffin (Fratercula arctica) [A204] Razorbill (Alca torda) [A200] Guillemot (Uria aalge) [A199] Little Gull (Hydrocoloeus minutus) (A862) Common Tern (Sterna hirundo) (A193)
		Mitigation measures are required to remove the potential of impacts on the SPA from indirect pathways via the Bremore Stream.

Analysis of the Potential Impacts on Natura 2000 Sites.

The proposed development is not within a designated conservation site. The nearest Natura 2000 site is the North-West Irish Sea SPA (1.5 km). Out of an abundance of caution, given the scale of the proposed development, the nature of the proposed works, the proximity of the subject site to the Bremore Stream, and the fact that the North-West Irish Sea SPA is located immediately downstream of the Bremore Stream (Figure 12), it is considered that, in the absence of mitigation, there is the potential for silt and contaminated surface water runoff to enter the Bremore Stream (via existing public surface water networks) and potentially give rise to significant effects on the Natura 2000 site.

The potential effects on Natura 2000 sites are seen in Table 5. The proposed clearance and construction works would impact on the existing ecology of the site and the surrounding area. In the absence of mitigation, this could lead to the transportation of dust, pollution, and contaminated surface water runoff to the proximate Bremore Stream with the potential for effects on the North-West Irish Sea SPA.

Construction and operational phase mitigation measures are required on site particularly as clearance of the site is proposed which will remove all existing terrestrial habitats and in the absence of mitigation would lead to silt laden and contaminated runoff entering the existing arterial drainage network currently servicing the existing housing estate to the east of the site, Bremore Stream, and the marine environment. Mitigation measures are required.

Mitigation Measures

Construction and operational mitigation will be incorporated into the proposed development project to minimise the potential negative impacts within the Zone of Influence (ZoI) including the Bremore Stream and downstream North-West Irish Sea SPA (Table 6).

	Table 5. Potential for adv	Table 5. Potential for adverse effects on the qualifying interests and conservation objectives of European sites
European Site & Site	Qualifying Interests	Potential for Adverse Effects
North-West Irish Sea SPA	Common Scoter (Melanitta nigra) [A065]	Construction Impacts Given the nature of the development, impacts would be expected to be localised in nature restricted to the immediate vicinity of the site. There is a potential for downstream impacts if significant quantities of pollution or silt
	Red-throated Diver (<i>Gavia stellata</i>) [A001]	were introduced into the onsite drainage network with potential for downstream impacts on North-West Irish Sea cSPA.
	Great Northern Diver (<i>Gavia</i> immer) [A003]	The proposed development site is not an ex-situ foraging site for the qualifying interests of this site (Appendix I). Site works have the potential for downstream impacts on aquatic biodiversity through the introduction of silt, dust,
	Fulmar (Fulmarus glacialis) [A009]	contamination and petrochemicals. The storage of topsoil or works onsite could lead to dust, soil of silk lades if from entering the marine environment. The mitigation measures need to take into account the potential impact from
	Manx Shearwater (<i>Puffinus</i> puffinus) [A013]	pluvial flooding, silt, dust (indirectly) and potential for contaminated material or pollutants from site. Contaminated surface water runoff on site during construction or operation may lead to silt or contaminated materials from site surface water runoff on site during construction or operation may lead to silt on-site concrete production is
	Shag (Phalacrocorax aristotelis) [A018]	entering the onsite surrace water network with downstream impacts on the continuous continuous required or cement works are carried out there is potential for contamination of the marine environment. The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and
	Cormorant (<i>Phalacrocorax carbo</i>) [A017]	chemicals could lead to pollution on site or in the marine environment. Impacts on the SPA from upstream sources have the potential to directly impact on the qualifying interests of the cSPA in the absence of mitigation measures. In the absence of mitigation measures there is the potential to impact on the distribution number and range of the
	Little Gull (Larus minutus) [A177]	following qualifying interests.
	Kittiwake (Rissa tridactyla) [A188]	Operational Impacts
	Black-headed Gull (Chroicocephalus ridibundus) [A179]	This cSPA is located in the subtidal environment. It would be expected that the holse levels from the proposed operation and the presence of people as a result of the development will not impact on the conservation objectives of this subtidal SPA. The development must comply with standard drainage requirements and the Water Pollution
	Common Gull (Larus canus) [A182]	Acts to ensure that silt, dust (indirect) and pollution are intercepted prior to reaching designated sites. Any increase
	Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]	In disturbance to this carries as not decined to be against the content of the potential to effect the distribution an abundance of caution, in the absence of mitigation measures (pollution control): number and range of the following qualifying interests in the absence of mitigation measures (pollution control):
	Herring Gull (Larus argentatus) [A184]	 Common Scoter (Melanitta nigra) [A065] Red-throated Diver (Gavia stellata) [A001]
	Great Black-backed Gull (<i>Larus</i> marinus) [A187]	 Great Northern Diver (Gavia immer) [A003] Fulmar (Fulmarus glacialis) [A009] Manx Shearwater (Puffinus puffinus) [A013] Shag (Phalacrocorax aristotelis) [A018]

	Table 5. Potential for ad	Table 5. Potential for adverse effects on the qualifying interests and conservation objectives of European sites
European Site & Site Code	Qualifying Interests	Potential for Adverse Effects
	Little Tern (Sterna albifrons) [A195]	Cormorant (<i>Phalacrocorax carbo</i>) [A017]
		• Little Gull (Larus minutus) [A177]
	Roseate Tern (Sterna dougallii)	• Kittiwake (Rissa tridactyla) [A188]
	[A192]	Black-headed Gull (Chroicocephalus ridibundus) [A179]
	Common Tern (Sterna hirundo)	Common Gull (Larus canus) [A182]
	[4193]	 Lesser Black-backed Gull (Larus fuscus) [A183]
	[CCTV]	 Herring Gull (Larus argentatus) [A184]
	Arctic Tern (Sterna paradisaea)	Great Black-backed Gull (Larus marinus) [A187]
	[A194]	• Little Tern (Sterna albifrons) [A195]
		• Roseate Tern (Sterna dougaliii) [A192]
	Puffin (Fratercula arctica) [A204]	Common Tern (Sterna hirundo) [A193]
	Rezorbill (Alca torda) [A200]	Arctic Tern (Sterna paradisaea) [A194]
	ומסקטן (ממים נסים מים (ממים)	Puffin (Fratercula arctica) [A204]
	Guillemot (<i>Uria aalge</i>) [A199]	Razorbill (Alca torda) [A200]
		• Guillemot (<i>Uria aalge</i>) [A199]
		Mitigation measures are required to remove the potential of impacts on the cSPA from indirect pathways via the
		drainage network during operation.

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- Habitat degradation - Mustined in the accompanying C - Dust deposition - Silt ingress from site runoff - Downstream impacts - Downstream impacts - Negative impacts on the aquatic species and qualifying interests. - The duration that subsoil layer as practicable (e.g. backfill of of landscaping): - The duration that subsoil layer as practicable (e.g. backfill of of landscaping): - Typical seasonal weather varial minimizing soil erosion. - Typical seasonal weather varial minimizing soil erosion. - The following measures are to be imperently interests. - Typical seasonal weather varial minimizing and signifying managements in the protection, fencing and signifying managements in the protection of surface watter runoff from area. - Magasures shall be implements interestical surface watter runoff from area.	Sensitive	Potential Impacts on	Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
As outlined in the accompanying C mitigation will be carried out in relation • Pollution • Silt ingress from site runoff • Downstream impacts • Negative impacts on the aquatic environment, aquatic species and qualifying interests. • The duration of Subsoil Layers • The duration that subsoil layer as practicable (e.g. backfill of of landscaping); • The duration soll erosion. 3.3 Weather Conditions • Typical seasonal weather varianimizing soil erosion. 5.0 Hydrology & Hydrogeology The following measures are to be interval where measures will be implemented where measures will be implemented.	Receptors	SPA	
a SPA • Dust deposition • Pollution • Silt ingress from site • Downstream impacts • Negative impacts on the aquatic environment, aquatic species and qualifying interests. • The duration that subsoil layers of flandscaping); • The duration that subsoil layers of flandscaping); • The duration that subsoil layers of flandscaping); • Similar to comments regarding soil erosion.' • Typical seasonal weather variation and Sediment Control • Maosures shall be implementationed white protection, fencing and site protection, fencing and site plant and vehic and seasonal weather variations and seasonal weathe	North-West	 Habitat degradation 	Construction Phase
 Silt ingress from site runoff Downstream impacts on the aquatic environment, aqualifying interests. Topsoil stockpiles shall also be a spracticable (e.g. backfill of of landscaping): Topsoil stockpiles shall also be a spracticable (e.g. backfill of of landscaping): Similar to comments regarding stockpiles of subsoil materials and varied properties. The duration that subsoil materials should not subsoil materials of landscaping): Similar to comments regarding stockpiles of subsoil materials and infinition soil erosion. The following measures are to be impensioned to the supplemented interests. Measures shall be implemented interesting soil erosion, demonstres will be implemented between the supplemented supplemented interesting soil erosion, demonstres will be implemented between the supplemented supplem	Irish Sea SPA Bremore	Dust depositionPollution	As outlined in the accompanying Construction Environmental Management Plan prepared by GDCL Consulting Engineers, the following mitigation will be carried out in relation to prevent significant increases.
 3.1 Stripping of Topsoil It is important that topsoil is render it useless for reuse; It is important to ensure that areas and site plant and vehic At any given time, the extent areas. Topsoil stockpiles shall also be areas. Topsoil stockpiles shall also be areas. The duration that subsoil layer as practicable (e.g. backfill of of landscaping); Similar to comments regarding Stockpiles of subsoil material son stockpiles of subsoil material son stockpiles of subsoil materials. Typical seasonal weather variaminimizing soil erosion. 5.0 Hydrology & Hydrogeology The following measures are to be impendente. Measures shall be implemente inlet protection, fencing and signal subserver measures will be implemente in the implemente in the implemente where measures will be implemente. 	Stream	 Silt ingress from site runoff 	'3.0 Soils & Geology
 It is important that topsoil is render it useless for reuse; It is important to ensure that areas and site plant and vehic. At any given time, the extent areas. Topsoil stockpiles shall also be areas. Topsoil stockpiles shall also be areas. The duration that subsoil layer as practicable (e.g. backfill of of andscaping); Similar to comments regarding Stockpiles of subsoil material sof and scather Conditions. Typical seasonal weather variation innimizing soil erosion. Typical seasonal weather variation minimizing soil erosion. S.O Hydrology & Hydrogeology. The following measures are to be impension and Sediment Control Measures shall be implemente inlet protection, fencing and signales measures where measures will he implemente where measures will he implemente where measures will he implemente where measures will he implemente 		 Downstream 	3.1 Stripping of Topsoil
 It is important to ensure that areas and site plant and vehic cies and areas. At any given time, the extent areas. Topsoil stockpiles shall also be '3.2 Excavation of Subsoil Layers The duration that subsoil layer as practicable (e.g. backfill of of landscaping); Similar to comments regardin Stockpiles of subsoil material; 3.3 Weather Conditions Typical seasonal weather varianimizing soil erosion. 5.0 Hydrology & Hydrogeology The following measures are to be impenionment. Measures shall be implemente inlet protection, fencing and signer measures while he implemented where measures will the implemented will the implemented where measures will the implemented where measures will the implemented where measures will the implemented will the implem		impactsNegative impacts on	 It is important that topsoil is kept completely separate from all other construction waste as any cross-contamination of the topsoil can render it useless for reuse;
 At any given time, the extent areas. Topsoil stockpiles shall also bh '3.2 Excavation of Subsoil Layers The duration that subsoil laye as practicable (e.g. backfill of of landscaping); Similar to comments regardin Stockpiles of subsoil material 3.3 Weather Conditions Typical seasonal weather variminimizing soil erosion.' '5.0 Hydrology & Hydrogeology The following measures are to be imenvironment. Measures shall be implement inlet protection, fencing and sinet protection. 		the aquatic environment.	 It is important to ensure that topsoil is protected from all kinds of vehicle damage and kept away from site-track, delivery vehicle turning areas and site plant and vehicle storage areas
'3.2 Excc 3.3 Wea 3.3 Wea The folloenvironn 5.1 Erosi		aquatic species and	 At any given time, the extent of topsoil strip (and consequent exposure of subsoil) shall be limited to the immediate vicinity of active work areas.
 3.2 Excavation of Subsoil Layers The duration that subsoil layers are exposed to the effects of weather shall be minimized. Disturbed subsoil lay as practicable (e.g. backfill of service trenches, construction of road copping layers, construction of building of landscaping); Similar to comments regarding stripped topsoil stockpiles of excavated subsoil material shall be protected for Stockpiles of subsoil material shall be located separately from topsoil stockpiles. 3.3 Weather Conditions Typical seasonal weather variations will also be taken account of when planning stripping of topsoil and exacminimizing soil erosion. 5.0 Hydrology & Hydrogeology The following measures are to be implemented during the construction phase in order to mitigate risks to the environment. Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment ret inlet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to open drained to experiment to open drained to control of the seasoned of the surface water runoff for manage and treat sediment control. Surface water runoff from and signage around specific exclusion zones and earth bunding adjacent to open drained where manages will be implemented to control and surface water runoff the management where manages will be implemented. 		daamymg meresis.	 Topsoil stockpiles shall also be located so as not to necessitate double handling.'
 The duration that subsoil layers are exposed to the effects of weather shall be minimized. Disturbed subsoil lay as practicable (e.g. backfill of service trenches, construction of road capping layers, construction of building of landscaping); Similar to comments regarding stripped topsoil, stockpiles of excavated subsoil material shall be protected for Stockpiles of subsoil material shall be located separately from topsoil stockpiles. 3:3 Weather Conditions Typical seasonal weather variations will also be taken account of when planning stripping of topsoil and exceminimizing soil erosion. 5:0 Hydrology & Hydrogeology The following measures are to be implemented during the construction phase in order to mitigate risks to the environment. Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment ret inlet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to open dra surface water runoff form areas stripped of topsoil and surface water runoff form aneasures will he implemented to the province water runoff form and stational descriptions and surface water runoff formaneasured to the province and treat sediment bunding adjacent to open dra where measures will he implemented to the province of the surface water runoff the implemented to the province of the surface water runoff to the informance of the province of the province			'3.2 Excavation of Subsoil Layers
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 3.3 Weather Conditions Typical seasonal weather variations will also be taken account of when planning stripping of topsoil and excominional minimizing soil erosion. 5.0 Hydrology & Hydrogeology The following measures are to be implemented during the construction phase in order to mitigate risks to the environment. 5.1 Erosion and Sediment Control • Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment retinet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to open drained burgines will he implemented to capture and and surface water culocitions shall be directed. • Surface water runoff from areas stripped of topsoil and and surface water collected in excavations shall be directed. 			 Similar to comments regarding stripped topsoil, stockpiles of excavated subsoil material shall be protected for the duration of the works. Stockpiles of subsoil material shall be located separately from topsoil stockpiles.
 Typical seasonal weather variations will also be taken account of when planning stripping of topsoil and excominimizing soil erosion. '5.0 Hydrology & Hydrageology The following measures are to be implemented during the construction phase in order to mitigate risks to the environment. 5.1 Erosion and Sediment Control • Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment ret inlet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to open drained by surface water runoff from areas stripped of topsoil and surface water collected in excavations shall be directed where measures will be implemented in continuous and today and surface water runoff he implemented in continuous and today and surface water runoff he implemented in continuous and today and surface water runoff he implemented in continuous and today and surface water runoff he implemented in continuous and today and surface water runoff he implemented in continuous and today and surface water runoff he implemented in continuous and surface water runoff he implemented in conti			3.3 Weather Conditions
 '5.0 Hydrology & Hydrogeology The following measures are to be implemented during the construction phase in order to mitigate risks to the environment. 5.1 Erosion and Sediment Control • Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment ret inlet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to open drain to be directed in excavations shall be directed where measures will he implemented to continue and treat collected in excavations shall be directed. 			 Typical seasonal weather variations will also be taken account of when planning stripping of topsoil and excavations with an objective of minimizing soil erosion.'
 The following measures are to be implemented during the construction phase in order to mitigate risks to the environment. 5.1 Erosion and Sediment Control • Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment ret inlet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to open drain surface water collected in excavations shall be directed where measures will he implemented to capture and took collected in excavations shall be directed. 			'5.0 Hydrology & Hydrogeology
 5.1 Erosion and Sediment Control Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment ret inlet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to open drain Surface water runoff from areas stripped of topsoil and surface water collected in excavations shall be directed where measures will he implemented to continue and took of the continue and the cont			The following measures are to be implemented during the construction phase in order to mitigate risks to the water and hydrogeological environment.
 Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment ret inlet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to open drained. Surface water runoff from areas stripped of topsoil and surface water collected in excavations shall be directed water and treat sodiment to the continuous and the continuous and treat sodiment to the continuous and treat sodiment to the continuous and the continuous an			5.1 Erosion and Sediment Control
Surface water runoff from areas stripped of topsoil and surface water collected in excavations shall be directed where measures will be implemented to continue and took collected.			 Measures shall be implemented to capture and treat sediment laden surface water runoff (e.g. sediment retention ponds, surface water inlet protection, fencing and signage around specific exclusion zones and earth bunding adjacent to onen drainger dischast.
On-site settlement ponds are to include geotextile liners and riprapped infets and outlets and outlets to previous			

Sensitive	Potential Impacts on	Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
Receptors	SPA	 Surface water discharge points during the construction phase are to be agreed with Fingal County Council's Environment Section prior to
		commencing works on site; Weather conditions and seasonal weather variations shall also be taken account of when planning stripping of topsoil and excavations, with an objective of minimizing soil erosion.
		5.2 Accidental Spills and Leaks
		 All oils, fuels, paints and other chemicals will be stored in a secure bunded hardstand area; Refuelling and servicing of construction machinery shall take place in a designated hardstand area which is also remote from any surface.
		 water inlets (when not possible to carry out such activities by) site). Discharge from any vehicle wheel wash areas is to be directed to on-site settlement ponds; A response procedure shall be put in place to deal with any accidental pollution events and spillage kits shall be available and construction staff will be familiar with the emergency procedures and use of the equipment;
		5.3 Concrete
		 Concrete batching will take place off site, wash down and wash out of concrete trucks will take place off site and any excess concrete is not to be disposed of on site; Pumped concrete will be monitored to ensure there is no accidental discharge; Mixer washings are not to be discharged into surface water drains.
		5.4 Wheel Wash Areas
		 Discharge from any vehicle wheel wash areas is to be directed to on-site settlement ponds, debris and sediment captured by vehicle wheel washes are to be disposed off-site at a licensed facility.
		6.0 Water Supply, Drainage & Utilities
		The following measures are to be implemented during the construction phase in order to mitigate risks to the water supply, drainage and utilities.
		 Surface water runoff from areas stripped of topsoil and surface water collected in excavations shall be directed to on-site settlement ponds where measures will be implemented to capture and treat sediment laden runoff prior to discharge of surface water at a controlled rate. Foul drainage discharge from the construction compound will be tankered off site to a licensed facility until a connection to the public foul drainage network has been established.'
		'9.0 Air, Dust & Climate Factors
		The Principal Contractor or equivalent must monitor the contractors' performance to ensure that the proposed construction phase mitigation measures are to be implemented and that construction impacts and nuisance are minimised. The following mitigation measures are to be implemented during the construction phase:
		 During working hours, dust control methods shall be monitored as appropriate, depending on the prevailing meteorological conditions; The name and contact details of a person to contact regarding air quality and dust issues shall be displayed on the site boundary, this
		notice board should also include head/regional office contact details; Community engagement shall be undertaken before works commence on site explaining the nature and duration of the works to local
		residents and businesses,

Sensitive	Potential Impacts on	Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
Receptors	SPA	
		 A complaints register shall be kept on site detailing all telephone calls and letters of complaint received in commodial management of activities, together with details of any remedial actions carried out; A speed restriction of 20 km/hr shall be applied as an effective control measure for dust for on-site vehicles using unpaved haul roads;
		 Access gates to the site shall be located at least 10m from sensitive receptors; Bowsers or equivalent watering equipment shall be available during periods of dry weather throughout the construction period. Watering
		shall be conducted during sustained dry periods to ensure that unpavea areas are kept moisu. The required applications and vehicular use; according to soil type, weather conditions and vehicular use;
		 Any hard surface roads shall be swept regularly to remove mud and aggregate materials from their surface while any unsurfaced roads. Shall be restricted to essential site traffic only;
		 During dry and windy periods, and when there is a likelihood of dust nuisance, watering shall be conducted to ensure moisture content of materials being moved is high enough to increase the stability of the soil and thus suppress dust;
		 During periods of very high winds (gales), construction activities likely to generate significant aust emissions should be postpolled and the subsided.
		 Overburden material shall be protected from exposure to wind by storing the material in sheltered regions of the site. Where possible overburden material in sheltered regions of the site.
		storage piles snould be located downwind by schalary constructions. • Vehicles delivering or collecting material with potential for dust emissions shall be enclosed or covered with tarpaulin at all times to restrict
		the escape of dust; At the main construction traffic exits, a wheel wash facility shall be installed. All trucks leaving the site must pass through the wheel wash. In addition, public roads outside the site shall be regularly inspected for cleanliness, as a minimum on a daily basis, and cleaned as
		necessary;
		12.0 Site Compound Facilities and Fairing
		The exact location of the construction compound is to be confirmed in advance of commencement of the works, and agreed with Fingal County Councily. The location of the construction compound is likely to be relocated during the course of the works, in line with the phasing of the development. The construction compound will include adequate welfare facilities such as wash rooms, drying rooms, canteen and first aid room as well as foul drainage and potable water supply.
		is a second of the construction compound will be tankered off site to a licensed facility until a connection to the public foul
		drainage uscharge john are Construction Composition Composition Composition of Arabida activities or materials; The construction compound's notable water supply shall be protected from contamination by any construction activities or materials;
		The construction compound will be enclosed by a security fence;
		 Access to the compound will be security controlled and all site visitors will be required to sign in an account of the security controlled for staff car parking; A nermeable hardstand area will be provided for staff car parking;
		 A separate permeable hardstand area will be provided for construction machinery and plant;
		 The construction compound will include a designated construction material recycling area; A series of way finding signate will be provided to direct staff, visitors and deliveries as required;
		 All construction materials, debris, temporary hardstands etc. in the vicinity of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed off-site on completion of the site compound will be removed of the site of the site compound will be removed on the site of the si
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		Maistering Manager to Dravent Impacts on North-West Irish Sea SPA	
Sensitive Recentors	Potential Impacts on SPA		
		As outlined in Chapter 5. Biodiversity of the accompanying EIAR, the following mitigation will be carried out in relation to prevent significant	gation will be carried out in relation to prevent significant
		impacts:	.*
		 'A project ecologist will be appointed to oversee all works. 	
		 Onsite drains will be protected from dust, silt and surface water throughout the works. 	he works.
		 Local silt traps established throughout site. 	
		 Mitigation measures on site include dust control, stockpiling away from drains. 	·
		 Stockpiling of loose materials will be kept to a minimum of 40m from drains. 	the draining custom
		• Stockpiles and runoff areas following clearance will have suitable barriers to prevent runojj oj jines into tile diamage system.	orevent ranajj oj jines into tile aramage system. Ili po et lovet som away from draips, excavations and other
		• Fuel, oil and chemical storage will be sited within a bunded area. The bund will be at least John away from almost chemical storage will be sited within a bunded area.	IIII DE AL IEUST JOHN UWUY JION UI UIII), CACACAGGGG CITA CATA
		focations where it may cause pollution.	politition. Smills with his hand area will be cleaned immediately to prevent aroundwater contamination. Any water-
		 Bunds will be kept clean and spins within the build used will be construction, that require pumping will not directly discharge to the surface water filled excavations, including the attenuation tank during construction, that require pumping will not directly discharge to the surface water 	quire pumping will not directly discharge to the surface water
		drainage network. Prior to discharge of water from excavations adequate filtration will be provided to ensure no deterioration of water	Itration will be provided to ensure no deterioration of wuter
		quality.	
		Petrochemical interception and bunds in rejucining ured	
		 On-site inspections to be carried out by project ecologist. 	and the second of any desirance extensions (p. a. de-silting
		 During the works sift traps will be put in place to prevent downstream impacts. Maintenance of any diameter structures for a comment. 	acts. Monntenance of any aranage surgeness test as sures
		operations) will not result in the release of contaminated water to the surface water network.	e water network.
		 Prior to site clearance the ecologist and arborist will assess the site works and oversee nabitat protection measures. 	d oversee nabitat protection measures.
		As outlined in Chapter 6. Land & Soils of the accompanying EIAR, the following m	ils of the accompanying EIAR, the following mitigation will be carried out in relation to prevent significant
		impacts:	
		enthusive appropriate shall be carried out subject to a soil management plan which will outline where topsoil to be re-used on site and	an which will outline where topsoil to be re-used on site and
		find suitable re-use for this finite resource at offsite locations. The construction will be phased, which allows topsoil management and soil	on will be phased, which allows topsoil management and soil
		protection from run-off as site is stripped in stages. The use of environmental degrading or persistent culentrals to remove vegetations in the protection from the protection from the protection from the protection of the protec	degrading or persistent chemicus to remove vegetation from a requirement at routes. It will be manaed to prevent run-off of soil sediment
		the site will not be permitted. Topsoil shall not go to landin of similar disposal received in a vegetation will be with dispersion of clean surface water around the stockpiles. A minimum stockpile height of 2m high will be enforced and vegetation will be	cpile height of 2m high will be enforced and vegetation will be
		encourage to stabilise the piles. Silt fencing will be placed around each stockpile.	pile.
		 Good housekeeping – waste management, chemical storage and use, adequate covered car parking to ensure hydrocarbons do not leach 	ate covered car parking to ensure hydrocarbons do not leach
		into expose soils from leaking vehicles etc; double walled tanks, bunded areas and spill control systems.	is and spill control systems. Journal thosa do not find their way into soils and aroundwater:
		 Maintenance of plant and machinery to ensure fuels and chemicals associated With these up not pluried under buildings and topsoil; 	id With these do not find their way med sons and specifical and topsoil;
		Waste Management - Materials management to ensure surplus minimum puring in the disposed to a waste management	ided to be generated will be disposed to a waste management
		Waste Management – Any materials under carried by the recorded and filed in addition to the NWCPO licence of the receiving waste	filed in addition to the NWCPO licence of the receiving waste
		management facility and the NWCPO licence of the haulier. Waste streams must be segregated on site.	must be segregated on site.
		 Chemical and Fuel Storage- To be bunded and spill kits to be available on site. 	To be bunded and spill kits to be available on site.
		 The cut & fill assessment has been carried out based on the existing ground revers and proposal ground assumed that up to soil will be retained on site for landscaping, tree pits, gardens and other landscape works to open spaces. It has been assumed that up to 	descape works to open spaces. It has been assumed that up to
		20% of the cut material will not be suitable for reuse on site (bounders, sof	not be suitable for reuse on site (bounders, soft clay / silts, or material with high moisture content).

		The state of the control of the cont
Sensitive	Potential Impacts on	Mitigation Measures to Prevent Impacts on North-West Hish Sea St.
Receptors		 Taking account of the cut & fill volumes noted below and the assumption of 20% cut material will have to be disposed of offsite and all top soil retained on site this means that the Net Fill volume increases to 55,270m3, this is less that the volume of imported aggreg , concrete and other hardstanding surfaces that are anticipated to be required for the construction phase of the project, hence there will be no requirement for imported fill other that construction based aggregates required for the works. The site design does not currently require slope stabilisation. In the event that this changes a specialist Geotechnical Engineer will assess
		and design any slope or retaining features. The above protocols should be audited on a monthly basis as part of the environmental health and safety site audit carried out by the main
		short term negative impacts associated with construction are imperceptible and neutral.' As outlined in Chapter 7. Hydrology & Hydrogeology of the accompanying EIAR, the following mitigation will be carried out in relation to prevent
		 significant impacts: ** Permeable haul roads and car parking will be located where possible outside the zones of high and extreme groundwater vulnerability i.e.
		southwest of the site; The Clonard Brook is 600m off site and therefore no direct mitigation measures are required for the works at the proposed development
		site; Refuelling on site to be in designated area only and to be mindful of the areas of high to extreme groundwater vulnerability areas when
		setting up site compounds i.e. no refuelling zones/chemical storage to be in these areas; Farthworks operations - The construction will be phased, which allows topsoil management and soil protection from run-off as the site is
		stripped in stages. The use of environmental degrading or persistent chemicals to remove vegetation from the site will not be permitted.
		It will be managed to prevent run-olf of soil sealinetic with disciplination of seasons and use, adequate covered car parking to ensure hydrocarbons do not leach Good housekeeping – waste management, chemical storage and use, adequate covered car parking to ensure hydrocarbons do not leach
		into exposed soils from leaking vehicles etc.; double walled tanks, bunded areas and spill control systems. Maintenance of plant and machinery to ensure fuels and chemicals associated with these do not find their way into soils and groundwater;
		 Waste Management – solid or liquid wastes not to be allowed to enter surface waters;
		 Chemical and Fuel Storage - to be bunded and spill kits to be available on site. Training of operatives in their use.
		 Identification and removal/blocking of any land drains leading toward Lady's well.
		 Creation of soil build or instantion of single-build and provided in the event that this changes a specialist Geotechnical Engineer will assess The site design does not currently require slope stabilisation. In the event that this changes a specialist Geotechnical Engineer will assess
		any groundwater management issues.
		As outlined in Chapter 9. Air Quality of the accompanying EIAR, the following mitigation will be carried out in relation to prevent significant
		impacts:
		'Site Management

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Sensitive Receptors	Potential Impacts on SPA	on Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
		 During working hours, dust control methods will be monitored as appropriate, depending on the prevailing meteorological conditions. Dry and windy conditions are favourable to dust suspension, therefore, mitigations must be implemented if undertaking du. , enerating activities during these weather conditions. A complaints register will be kept on site detailing all telephone calls and letters of complaint received in connection with dust nuisance or air quality concerns, together with details of any remedial actions carried out.
		Preparing and Maintaining the Site
		 Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible. Erect solid screens or barriers around dusty activities or the site boundary that are at least as high as any stockpiles on site. Fully enclose specific operations where there is a high potential for dust production and the site is active for an extensive period.
		 Avoid site funcify of water or mud. Keep site fencing, barriers and scaffolding clean using wet methods. Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below.
		Operating Vehicles / Machinery and Sustainable Travel
		 Ensure all vehicles switch off engines when stationary - no idling vehicles. Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable. Impose and signpost a maximum-speed-limit of 15 kph haul roads and work areas (if long haul routes are required these speeds may be increased with suitable additional control measures provided, subject to the approval of the nominated undertaker and with the agreement of the local authority, where appropriate). Produce a Construction Logistics Plan to manage the sustainable delivery of goods and materials. Implement a Travel Plan that supports and encourages sustainable travel (public transport, cycling, walking, and car-sharing)
		<u>Operations</u>
		 Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems. Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where nossible and appropriate.
		 Use enclosed chutes and conveyors and covered skips. Winimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate. Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the
		event using wet cleaning methods.
		Waste Management
		Avoid bonfires and burning of waste materials.

Sensitive	Potential Impacts on	on Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
Receptors	SPA	
		<u>Measures Specific to Demolition</u>
		 Prior to demolition blocks should be soft striped inside buildings (retaining walls and windows in the rest of the building where possible, to
		 provide a screen against dust). During the demolition process, water suppression should be used, preferably with a hand-held spray. Only the use of cutting, grinding or
		sawing equipment jitted of used in conjunction with a salitable dust supplication recumique again of the property of the prope
		 Drop heights from conveyors, loading shovels, hoppers and other loading equipment should be minimised, if necessary fine water sprays
		 Avoid explosive blasting, using appropriate manual or mechanical alternatives.
		<u>Measures Specific to Earthworks</u>
		Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable. Re-vegetate earthworks and exposed areas/soil stockpiles to re-venetate or cover with topsoil, as soon as practicable.
		 Use Hessian, muiches or trackijiers where it is not possible to be registated in some in the cover in small areas during work and not all at once. Only remove the cover in small areas during work and not all at once.
		 During dry and windy periods, and when there is a likelihood of dust indicative, a course mile process. enough to increase the stability of the soil and thus suppress dust.
		Measures Specific to Construction
		 Avoid scabbling (roughening of concrete surfaces) if possible. Ensure sond and other aggregates are stored in bunded areas and are not allowed to dry out, unless this is required for a particular process,
		in which case ensure that appropriate additional control measures are in place. Course built coment and other fine powder materials are delivered in enclosed tankers and stored in silos with suitable emission control
		systems to prevent escape of material and overfilling during delivery. For smaller supplies of fine power materials ensure bags are sealed after use and stored appropriately to prevent dust.
		<u>Measures Specific to Trackout</u>
		 A speed restriction of 15 kph will be applied as an effective control measure for dust for on-site vehicles.
		• Street and footpath cleaning must be undertaken during the ground works phase to minimise dust emissions. This can be carried out using • Street and footpath cleaning area then a suitable
		water-ussisted aust sweepensy, it smeeping across a commercial smeeping and a commercial smeeping across will be used.
		 Avoid dry sweeping of large areas.
		 Inspect on-site hauf routes for integrity and instigate necessary repairs to the surface as soon as reasonably practicable.
		Record all inspections of haul routes and any subsequent action in a site log book.
		 Install hard surfaced haul routes, which are regularly damped down with fixed or mobile sprinkler systems, or mobile water bowsers and
		regularly cleaned.
		 Implement a wneel Wasning system (With Fairbie grius to dislouge accommissed and the properties of the prop

Sensitive	Potential Impacts on	Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
Receptors	SPA	And the state of t
		 Ensure there is an adequate area of hard surfaced road between the wheel wash facility and the site exit, wherever site size and loyout normits
		• Access gates to be located at least 10 m from receptors where possible.
		Monitoring
		• Undertake daily on-site and off-site inspections, where receptors (including roads) are nearby, to monitor dust, record inspection results in
		the site inspection log. This should include regular dust soling checks of surfaces such as successionally, with cleaning to be provided if necessary.
		 Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high and account of air are being carried out and during prolonged day or windy conditions.
		Monitoring of construction dust deposition along the site boundary to nearby sensitive receptors during the demolition and ground works
		phases of the proposed development is required to ensure mitigation measures are working satisfactorily. Inis can be carried out using the Bergerhoff method in accordance with the requirements of the German Standard VDI 2119. The Bergerhoff Gauge consists of a collecting
		vessel and a stand with a protecting gauge. The collecting vessel is secured to the stand with the opening of the collecting vessel located approximately 2m above ground level. The TA Luft limit value is 350 mg/m2 /day during the monitoring period of 30 days (+/- 2 days).
		<u>Operational Phase</u>
		As outlined in Chapter 5. Biodiversity of the accompanying EIAR, the following mitigation will be carried out in relation to prevent significant
		impacts:
		 'A project ecologist will be appointed to oversee completion of all landscape, lighting and drainage works. Detrochemical interception will be inspected by the project ecologist to ensure compliance with Water Pollution Acts.
		 Post Construction assessment/compliance with proposed lighting strategy Mitigation During Operation
		 Mitigation measures will be in place to comply with water rollation Acts.
		As outlined in Chapter 6. Land & Soils of the accompanying EIAR, the following mitigation will be carried out in relation to prevent significant
		impacts:
		'Standard practice in drainage design would require the inclusion of fuel interceptors in the drainage system to ensure hydrocarbons are not
		discharged to surface waters and groundwater.
		Communal landscaped areas managed by the development management company should endeavour to limit pesticide use etc to maintain the integrity of soils.
		The impact of soil sealing will be mitigated against by the use of sustainable urban drainage features such as swales etc.
		Design should encourage the redistribution of topsoil to garden and communal landscaping areas where practical.
		Continuing maintenance of foul water pipelines by Irish Water or other relevant authority should minimise the potential for sewerage related
	_	Containing to be receased to support

Sensitive Receptors	Potential Impacts on SPA	Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
		Cumulative impacts of the adjacent Taylors Hill & Ladywell development in conjunction with this one should be considered in relation to sail stripping and prevention of sediment run-off into water courses. Silt/sediment interceptors/barrier should be set up to safeguard the Clonard skagainst run-off.
		The Local Authority or Estate Management Team should ensure fuel interceptors etc. are maintained and that chemical use on public landscaped areas is limited.'
		As outlined in Chapter 7. Hydrology & Hydrogeology of the accompanying EIAR, the following mitigation will be carried out in relation to prevent significant impacts:
		'Drainage has been designed to best practice as required under GDSDS, the SuDS Manual, and Sewers for Adoption.
		The greenfield run-off has been determined for design return periods, and outflow from the site, will be attenuated to this value. An allowance of 20% is built into the calculations and design to account for climate change predictions in rainfall intensity.
		Nature based SuDS devices will involve direct infiltration to ground via permeable paving, integrated constructed tree pits and bio-infiltration areas (road side gardens) with a formal piped gravity system discharging to 11 no. individual attenuation systems which will allow for infiltration of the interception storage volume and will attenuate flows from the development. The basins will be discharged through flow control devices to the existing storm sewer network in the area. In total 5 no. connection points are proposed at various locations.
		Standard practice in drainage design includes fuel interceptors in the drainage system to ensure hydrocarbons are not discharged to surface waters and groundwater.
		Communal landscaped areas managed by the development management company should endeavour to limit pesticide use etc. to maintain the integrity of soils.
		Use of sustainable urban drainage features such as swales etc. should ensure any pathways for contaminants to groundwater are not created. Best practice has been adhered to in design.
		Continuing maintenance of foul water pipelines by Irish Water or other relevant authority should minimise the potential for sewerage related contaminants to be released to subsoils and or water receptors.
		Cumulative impacts of the adjacent Taylors Hill & Ladywell developments in conjunction with this one have been considered. The developments will result in the creation of an impermeable area on a hill and a reduction of area for precipitation infiltration. The impact of climate change and flash flooding on downstream receptors should be addressed. This is addressed in SUDs design to ensure adequate infiltration/retention on site during such events.
		Review of plans for adjacent developments such as Taylors Hill and Ladswell indicates a similar approach to stormwater management, with off-site flows limited to the original greenfield run-off values, together with the use of basins and stormtech cells to comply with the GDSDS requirements.
		Implementation of these measures will eliminate any increased risk or cumulative risk of flooding in the existing watercourses.
		Coastal flooding does not affect the site and the development is not likely to have an impact on this type of flooding.

Sensitive	Potential Impacts on	Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
Receptors	SPA	With regards to fluvial flooding it is important to maintain the natural vegetated channels of the Clonard Brook and its flood plain to ensure development does not create a fluvial flooding problem. There are plans for the Taylors Hill Phase 3 development to allow for this b, aintaining
		a riparian buffer zone along the banks of the brook. The Clonard Brook is off the proposed development site by approximately occurs,
		The Local Authority or Estate Management Team should ensure just measure for a construction of a similar and a sim
		Standard practice in drainage design would require the inclusion of fuel interceptors in the drainage system to ensure hydrocarbons are not discharged to surface waters and groundwater. Sustainable urban drainage such as swales etc. would alleviate the loss in infiltration area due to the increase in hardstanding.'
		Additionally, the following mitigation measures will be implemented:
		Construction Mitigation
		Supervision An Ecological Clerk of Works will supervise works on site.
		Surface Water Control
		 Local slit traps established throughout site: Mitigation measures on site include dust control, stockpiling away from drains
		 Stockpiling of loose materials will be kept to a finding of control of fines into the drainage system. Stockpiles and runoff areas following clearance will have suitable barriers to prevent runoff of fines into the drainage system.
		Fuel, oil and chemical storage will be sired within a second of the second of the second and the second and second of the s
		 Bunds will be kept clean and spills within the bund area will be cleaned innihedrately to prevent grounding and spills within the bund area will be cleaned innihedrately be cleaned in the public network. Prior to discharge of water from excavations that require pumping will not directly discharge to the public network. Prior to discharge of water from excavations.
		adequate filtration will be provided to ensure no deterioration of water quality. • During the construction works silt traps will be put in place in the vicinity of all runoff channels to prevent sediment entering the public
		network. • Petrochemical interception and bunds in refuelling area
		 Maintenance of any drainage structures (e.g. de-silting operations) will not result in the release of contaminated water to the sulface water
		network. No entry of solids to the associated stream or drainage network during the connection of pipework to the public water system No entry of solids to the associated stream or drainage network during the connection of pipework to the public water system
		 Sufficient onsite cleaning of vehicles prior to leaving the site and on nearby roads, will be carried out, particularly during a carried out to The Site Manager will be responsible for the pollution prevention programme and will ensure that at least daily checks are carried out to
		ensure compliance. A record of these checks will be maintained.
		The site compound will include a dedicated build for the bunded area. vehicles/machinery will only be carried out within the bunded area.

		The state of Month Work Inject Con CDA
Sensitive	Potential Impacts on SPA	Mitigation Measures to Prevent impacts on North-West instruction
a condensa		 Concrete trucks, cement mixers or drums/bins are only permitted to wash out in designated wash out area greater than 50m from sensitive
		receptors including drains.
		 Spill containment equipment stall be available for use in the cyclic of the checked on a scheduled basis.
		Air & Dust
		Mitigation measures will be carried out reduce dust emissions to a level that avoids the possibility of duverse effects off planty include the following:
		Excavation of material;
		 Materials handling and storage;
		 Movement of vehicles (particularly HGV's) and mobile plant.
		 Contaminated surface runoff
		Mitigation measures to be in place: Trinks leaving the site with excavated material will be covered so as to avoid dust emissions along the haulage routes.
		 Speed limits on site (15kmh) to reduce dust generation and mobilisation.
		 Regular inspections of the site and boundary should be carried out to monitor dust, records and notes on these maperations arrows and properties.
		logged. Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record
		the measures taken.
		Make the complaints log available to the local authority when asked.
		Record any exceptional incidents that cause dust and/or air emissions, eliner oir oi oilsite, aird the decident cause dust and/or air emissions, eliner oir oi oilsite, aird the decident cause that have book
		Maniforing
		• Undertake daily on-site and off-site inspection, where receptors are nearby, to monitor dust, record inspection results, and make the log
		available to the local authority when asked. This should include regular dust soiling checks of surfaces within 100 m of site boundary,
		integrity of the silt control measures, with cleaning and / or repair to be provided if necessary.
		Preparing and Maintaining the Site
		 Plan site layout so that machinery and dust causing activities are increased away increased away in contraction and the site is active for an extensive period.
		Avoid site runoff of water or mud.
		 Keep site fencing, barriers and scaffolding clean using wet methods.
		 Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-
		used on-site cover as described below.
		• Cover, seed or fence stockpiles to prevent wind whipping.
		 Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un-surface roads will be swept to remove mud and aggregate materials from their surface while any un-surface roads will be swept to remove mud and aggregate materials from their surface while any units of the same of
		to essential site traffic.
		 Any road that has the potential to give rise to fugitive dust will be regularly watered, as appropriate, during dry and or which will be regularly watered.

Sensitive Receptors	Potential Impacts on SPA	Mitigation Measures to Prevent Impacts on North-West Irish Sea SPA
		(
		 Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as w sprays or
		local extraction, e.g. suitable local exhaust ventilation systems.
		• Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where
		possible and appropriate.
		 Use enclosed chutes and conveyors and covered skips.
		 Minimise drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on
		such equipment wherever appropriate.
		 Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods.
		Waste
		 Avoid bonfires and burning of waste materials.
		Measures Specific to Earthworks
		 Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable.
		11co Location and choice of trackifiers where it is not not solve that or cover with tonsoil as soon as practicable.
		Ose Hessially indicates of tracking a meter in 5 meters for the second of the contract of the contract in small areas during work and not all at once.
		• Only remove the cover in small account and the state of the small operate to ensure majeture content is high
		 During dry and windy periods, and when there is a likelihood of dust fluisable, a bowser will operate to ensure mostare content is first.
		enough to increase the stability of the soil and thus suppress dust.
		 The Contractor will be required to consult with an ecologist prior to the beginning of works to identify any additional measures that may
		be appropriate and/or required.
		Storage/Use of Materials, Plant & Equipment
		 Materials, plant and equipment shall be stored in the proposed site compound location;
		 All oils fuels and other hazardous liquid materials shall be clearly labelled and stored in an upright position in an enclosed bunded area
		within the proposed development site compound. The capacity of the bunded area shall conform with EPA Guidelines – hold 110% of the
		contents or 110% of the largest container whichever is greater;
		• Find may be stored in the designated bunded area or in fuel bowsers located in the proposed compound location. Fuel bowsers shall be
		double skinned and equipmed with certificates of conformity or integrity tested, in good condition and have no signs of leaks or spillages;
		Countries and equipped with control comments of the control of the control of the control of the last
		 Smaller quantities of fuel may be carried/stored in clearly labelled metal Jeri cans. Green for diesel and red for petrol and mixes. The Jeri
		cans shall be in good condition and have secure lockable lids. The Jeri cans shall be stored in a drip tray when not in use.
		 Drip trays will be turned upside down if not in use to prevent the collection of rainwater;
		 Operational Phase Mittgation A project ecologist will be appointed to oversee completion of all landscape and drainage works.
		 Petrochemical interception will be inspected by the project ecologist to ensure compliance with Water Pollution Acts.

Adverse Effects on the conservation objectives of Natura 2000 sites likely to ocur from the project (post mitigation)

A robust series of mitigation measures are outlined. These would ensure that surface water runoff from the proposed works site is clean, uncontaminated and that dust from the works would not significantly impact on the Bremore Stream and the downstream Natura 2000 site (North-West Irish Sea SPA). It should be noted that the early implementation of ecological supervision on site prior to the initial mobilisation and enabling works will be an important element of the project. This will ensure the implementation of surface water runoff mitigation strategies and the mitigation to protect the watercourse from proximate works from the outset.

With the successful implementation of the mitigation measures to limit surface water impacts on the Bremore Stream, including mitigation/supervision, no significant impacts are foreseen from the construction and operation of the proposed project. Residual impacts of the proposed project will be localised to the immediate vicinity of the proposed works and would not impact on the integrity of the proximate Natura 2000 site.

The construction and operational mitigation proposed for the development satisfactorily addresses the mitigation of potential impacts on North-West Irish Sea SPA, through the application of the standard construction and operational phase controls as outlined above. No significant adverse impacts on the conservation objectives of North-West Irish Sea SPA are likely following the implementation of the mitigation measures outlined above.

It is essential that these measures outlined are complied with, to ensure that the proposed development does not have "downstream" environmental impacts. These measures are to protect the surface water, which is the primary vector of impacts from the site, and to ensure that it is not impacted during construction and operation.

Conclusion

been concluded that significant effects on the North-West Irish Sea SPA are likely from the proposed works in the absence of mitigation measures, primarily as a result of direct hydrological connection to the site via dust pollution and surface water runoff to the existing arterial drainage network currently servicing the existing housing estate to the east of the site and the Bremore Stream. For this reason, an NIS was carried out to assess whether the proposed project, either alone or in combination with other plans or projects, in view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of the European Site. All other Natura 2000 sites were screened out at initial screening.

Construction works will create localised noise disturbance that will not impact on Natura 2000 sites. Mitigation measures will be in place to ensure that there are no significant impacts on the surface water that leads to the marine environment.

Following the implementation of the mitigation measures outlined, the construction and operation of the proposed development would not be deemed to adversely affect the integrity of the North-West Irish Sea SPA, alone in combination with other plans and projects. No significant adverse effects are likely on all other Natura 2000 sites, in the absence of mitigation, alone in combination with other plans and projects.

This report presents an Appropriate Assessment Screening and NIS for the proposed development. It outlines the information required for the competent authority to screen for appropriate assessment and to determine whether or not the proposed development, either alone or in combination with other plans or projects, in view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of the European site.

I A wintering bird assessment was carried out (Appendix I a and Ib). It is important to note that of all the qualifying interests of nearby SPA's only Herring gull were noted on site throughout all of the wintering bird surveys and with that, the maximum amount observed on site were "20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4th of November 2023." As seen in Appendix 2 the proposed development site consists primarily of arable crops (Rape) during the site assessments. This would be considered a habitat of low importance to wintering birds. The site is not of significance to wintering birds and is not an ex-situ site for wintering birds for proximate SPAs.

On the basis of the content of this report, the competent authority is enabled to conduct an Appropriate Assessment and consider whether, either alone or in combination with other plans or projects, in view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of the European site.

No significant effects are likely on Natura 2000 sites, their features of interest or conservation objectives. The proposed project will not will adversely affect the integrity of European sites.

Data used for the AA Screening/NIS Assessment

NPWS site synopses and Conservation objectives of sites within 15km were examined. There is no direct pathway to any Natura 2000 sites beyond 15km of the proposed development site. The most recent SAC and SPA boundary shapefiles were downloaded and overlaid on Bing maps and satellite imagery.

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Appendix I - Ornithological Survey of lands at Flemington Lane, Balbriggan, Cq Dublin (February - March 2023)

1. Introduction

Joseph Adamson MCIEEM was appointed by Alternar Ltd. to conduct an ornithological survey of a parcel of land at Flemington Lane, located to the northwest of the town of Balbriggan, Co. Dublin. The purpose of the site visits was to survey the site to record species of birds that are frequenting the area.

2. Survey Area

The survey site, comprising of two parcels of land, lies to the west of a housing estate in an area of Balbriggan known as Flemington. The larger of the two parcels is bounded to the north by agricultural fields, to the south by a new residential housing estate, and to the east by a housing estate in an area of Balbriggan known as Tankardstown. A water treatment plant that serves the town of Balbriggan is located to the west of the site. A new road leading from the Tankardstown housing estate to the entrance to the water treatment plant bisects the site in an east-west direction. A dirt track trends from the south of the site through the centre of the site.

The second parcel is much smaller in size and is comprised of an agricultural field, bounded by a hedgerow to the south of it. This parcel is located west of the larger parcel and to the north of the water treatment plant

The survey site was dominated for the most part by agricultural fields containing Oil Seed Rape (OSR). There are very few hedgerows within the site, and those that are present are in poor condition with wide gaps. The larger parcel of the site was accessed from the south, through a new housing estate. The smaller parcel was accessed from a secondary road that borders the field to the west.

3. Methodology

The site was surveyed on the 27th and 28th February, and the 7th, 18th and 21st March 2023. Weather at the times of survey was suitable for recording, with bright and sunny spells for the most part, with occasional showers on the 18th and 21st March.

All areas within the sight boundary were surveyed by systematically walking and recording birds heard and observed. A list of birds observed during the site visit was then compiled for the entire site (Table 1).

A note was made of any species of conservation interest recorded at the site. Species highlighted in red represent species whose breeding population has declined by 50% over the last 25-30 years. Species highlighted in amber represent species that are of European

Conservation Concern. They are Amber-listed because of their unfavourable conservation status but not concentrated in Europe. The remaining species are Green-listed, species of favourable conservation status (Gilbert, G., Stanbury, A., and Lewis, I.) (Ref.1).

4. Results

Table 1: Bird species recorded within the site during the Winter Bird Survey, 2023, at Flemington Lane, Balbriggan, Co. Dublin

Species	Qualification Criteria	Comments
Common Buzzard Bute <i>o</i> buteo		Observed on four occasions throughout the site lusually seen commuting over the fields within the site. There are no suitable trees for preeding within the site.
Herring Gull Lorus argentatus	SPEC2, BDMp1 BDMp2	Birds were frequently coserved over the site due to the proximity of the survey site to the coast.
Woodpigeon Columba palumbus		Frequently observed overhead. Likely to preed in mature nedgerows and trees outside of the site.
Meadow Pipit Anthus pratensis	SPEC1	Occusionally flushed from the OSR fields. Likely to preed in small numbers within the site.
Pied Wagtail Motacilla alba yarelli		Observed along the track that runs in a northerly direction through the site and the new road leading to the water treatment biant.
Wren Traglodytes traglodytes		Distantly observed on one occasion. May breed in hedgerows at the north of the site.
Robin Erithacus rubecula		One neard singing in residential garden, east of theis te.
Fieldfare		A flock of 15 was observed flying over the site on the 27" of March
Turdus pilaris		A Winter visitor to Ire and from Northern and Central Europe Does not preed
Blackbird		Frequently observed in small numbers within the site on all survey dates
Turdus merula		Likely to breed within the site.
Magpie <i>Pica pica</i>		Infrequently observed over the site on all survey dates.
Jackdaw Corvus monedula		Occasionally observed flying overhead on all survey dates. Likely to preed in the housing estate east of the site.
Rook		Frequently poserved flying overhead. No looker elsiposerved on the site.

Species	Qualification Criteria	Comments
Corvus frugilegus		
Raven Corvus corax		Two observed flying overhead on the 27° of February
Starling Sturnus vuigaris	SPEC 3	Occasionally observed flying over the site. Likely to preed in the nousing estate east of the site.
Chaffinch Fringilla coelebs		A flock of 6 was observed on waste ground, south of the site on the 21^κ March
Redpoll Acanthis flammea		Occasionally observed in single numbers over the site. May breed in nedgerows to the north of the site.
Linnet Carduelis cannabina	SPEC 2	Focks of up to 15 and viduals were observed on the waste ground south of the site during all survey dates. Focks of Einnets are common on waste ground and open fields in Winter on the East coast of Ireland in and the birds may be minigrants from Scotland or the Northwest of England. May breed in nedgerows in small numbers, north of the site.
Goldfinch		Occasionally observed on all survey dates.
Carduelis carduelis		Common in He and and may proed in hedgerows at the north of theis le
Yellowhammer Emberiza citrinella	BDp2.8D-2	A single individual was flushed from one of the OSR fields of the 18". March iA male and female was observed on the 21" of March. A scarce bird in Ireland, but can be guite frequently observed in parts of North County Dublin and Meath.
		May breed within the site.

Qualifying criteria: Red List Criteria- SPEC1 (species that are of global conservation concern). SPEC3 (species are those for which the global population is concentrated outside EuropeBDp1 (breeding population decline over shorter time periods) BDp2 (breeding population decline over longer time periods). BDp2 (breeding range decline over longer time periods) Amber List Criteria- Categories that depict an unfavourable conservation status in Europe, but not necessarily of global concern. WI (Localised non-breeding population) WDMp1 (Moderate non-breeding population decline over the short term) BDMr1 and 8DMr2 (Moderate breeding range decline over short term (1) and long term(2) BDMp1 (short-term decline in breeding population), BDMp2 (long-term decline in breeding population). SPEC 2 (species for which the global population is concentrated in Europe). SPEC 3 (species for which the global population is concentrated outside of Europe)

A total of nineteen bird species was observed during the Winter site visits. Two Red-Listed species, namely meadow pipit and yellowhammer were observed during the site visits. The two Red -Listed species may breed within the site. Three Amber-Listed species, herring gull, starling and linnet were observed during the site visits. The only Amber-Listed species that may breed within the site is linnet. All other species observed are Green-Listed, species of favourable conservation status.

5. Discussion

Birds observed at the Flemington Lane site are typical of the habitats present. The species assemblage is a reflection of the agricultural fields, hedgerows and overgrown waste ground habitats within and around the site and the birds observed are typical of birds occurring in these habitats in North County Dublin in Winter.

The agricultural grassland fields to the west of the site within the boundary of the water treatment plant were devoid of birds for the most part, with the exception of birds observed flying overhead.

6. Reference

Ref. 1 Gilbert, G, Stanbury, A. & Lewis, I K. Birds of Conservation Concern in Ireland 4: 2020–2026. Irish Birds 43: 1-23.

Appendix 1b - Ornithological Survey of lands at Flemington Lane, Balbriggan, Cq Oublin (Winter 2023).

1. Introduction

Joseph Adamson MCIEEM was appointed by Alternar Ltd. to conduct a Winter ornithological survey of a parcel of land at Flemington Lane, located to the northwest of the town of Balbriggan, Co. Dublin, over the Winter of 2023/2024. This follows on from an ornithological survey of the site, carried out in February and March of 2023 by the same author. The purpose of the site visits was to survey the site to record species of birds that are frequenting the area.

2. Survey Area

The survey site, comprising of two parcels of land, lies to the west of a housing estate in an area of Balbriggan known as Flemington. The larger of the two parcels is bounded to the north by agricultural fields, to the south by a new residential housing estate, and to the east by a housing estate in an area of Balbriggan known as Tankardstown. A water treatment plant that serves the town of Balbriggan is located to the west of the site. A new road leading from the Tankardstown housing estate to the entrance to the water treatment plant bisects the site in an east-west direction. A dirt track trends from the south of the site through the centre of the site.

The second parcel is much smaller in size and is comprised of an agricultural field, bounded by a hedgerow to the south of it. This parcel is located west of the larger parcel and to the north of the water treatment plant.

The survey site was dominated for the most part by agricultural fields of stubble in which it appeared that Corn had been grown in the Summer of 2023. During the survey of February and March 2023, these agricultural fields had been under Oil Seed Rape. During the survey on the 18th of January 2024, it was evident that one of the stubble fields by the road leading up to the Water Treatment Plant had been partially ploughed when workers from the Plant were installing Sluice Valves, Air Valves and Fire Hydrants by the edge of the field. There are very few hedgerows within the site, and those that are present are in poor condition with wide gaps. The larger parcel of the site was accessed from the east, through the entrance to the Balbriggan Water Treatment Plant, which is located to the west of the site. The smaller parcel was accessed from a secondary road that borders the field to the west.

3. Methodology

The site was surveyed on the 25th and 29th October, the 4th and 20th November, the 4th and 24th December 2023, the 8th and 18th January, the 5th and 19th of February and the 3rd and 11th March 2024. Weather at the times of survey was suitable for recording, with clear spells for the most part, with strong northwesterly winds on the 4th of November 2023 and very strong southwesterlies on the 24th December 2024.

All areas within the sight boundary were surveyed by systematically walking and recording birds heard and observed. A list of birds observed during the site visit was then compiled for the entire site (Table 1).

A note was made of any species of conservation interest recorded at the site. Species highlighted in red represent species whose breeding population has declined by 50% over the last 25-30 years. Species highlighted in amber represent species that are of European Conservation Concern. They are Amber-listed because of their unfavourable conservation status but not concentrated in Europe. The remaining species are Green-listed, species of favourable conservation status (Gilbert, G., Stanbury, A., and Lewis, I.) (Ref.1).

4. Results

Tuble 1: Bird species recorded within the site during the Winter Bird Survey of 2023/2024, at Flemington Lune, Balbriggan, Co. Dublin

Species	Qualification Criteria	Comments
Common Buzzard		Two birds were observed circling over the stubble field by the road leading to the Water Treatment Plant on the 4 th November 2023.
Buteo buteo		One bird observed hunting over the field by the water treatment plant on the 4 th December 2023. This field is outside of the site boundary.
	SPEC2, BDMp1, BDMp2	Six birds were observed over the site on the 25 th of October 2023.
		20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4 th of November 2023. There were very heavy showers, with Force 3-4 north-easterly winds on this date.
		No Herring Gulls were observed at the site on the 4 th of December 2023.
		A group of thirty-one Herring Gulls was observed sitting in the stubble field by the road leading to the Water Treatment Plant on the 24th of December 2023. These birds were sheltering due to very blustery Force 5-6 southwest winds and heavy squalls.
Herring Gull Larus argentatus		No Herring Gulls were observed during the 18 th of January 2024 site survey due to disturbance from Water Treatment Plant Workers installing valves at the edge of the field by th road leading to the Water Treatment Plant.
300001001 8 .1100195.09		No Herring Gulls were observed during the 5 th of February site visit.
		Four Herring Gulls were observed sitting and occasionally feeding alongside Rooks in the ploughed areas of the stubble field by the road leading to the Water Treatment Plant on the 19 th of February.
		During the site visit on the 3 rd of March, there were lots of Herring Gulls on roof tops of the housing estate to the east of the site. A lot of these birds were observed in pairs, indicating that they would be ready to start breeding.
		On the same date three Herring Gulls were feeding on the ploughed strip of the stubble field with Rooks and Jackdaw
		There were no Herring Gulls observed on the stubble field during the 11 th March site visit.
Woodpigeon Columba palumbus		Frequently observed overhead. Likely to breed in mature hedgerows and trees outside of the site.
Collared Dove Streptopelia decaocto		One bird flew over the site in an easterly direction on the 20 th November 2023. One bird observed flying overhead o the 24th December 2023.
Meadow Pipit	SPEC1	Occasionally flushed from all the stubble fields in low
Anthus pratensis		numbers. Likely to breed in small numbers within the site

pecies	Qualification Criteria	Comments
		in particular the field within the site that is currently under grass.
kylark Alauda arvensis	SPEC3	Small numbers were observed flying overhead during the 25 th of October site visit. These were most likely migratory birds.
Pied Wagtail Motacilla alba yarelli		Observed along the track that runs in a northerly direction through the site and the new road leading to the water treatment plant.
Nren Troglodytes troglodytes		Distantly observed on one occasion. May breed in hedgerows at the north of the site.
Robin Erithacus rubecula		Four birds singing on the site on the 25 th October 2023.
D- duin-	-	Three birds observed on the site on the 4 th November 2023.
Redwing Turdus iliacus		A Winter visitor to Ireland from Iceland and Scandinavia. Does not breed.
Blackbird		Frequently observed in small numbers within the site on all survey dates.
Turdus merula		Likely to breed within the site.
Magpie Pica pica		Infrequently observed over the site on all survey dates.
Jackdaw Corvus monedula		Occasionally observed flying overhead on all survey dates. Observed feeding in the stubble field that was partially ploughed/disturbed during the January 2024 site visit. Likely to breed in the housing estate east of the site.
Rook Corvus frugilegus		Frequently observed flying overhead. Also observed feeding in the stubble field that was partially ploughed in January 2024. No rookeries observed on the site.
Starling Sturnus vulgaris	SPEC 3	Occasionally observed flying over the site. Likely to breed in the housing estate east of the site.
Chaffinch Fringilla coelebs		Occasionally observed at the site, associating with other finches. May breed in hedgerows within the site
Redpoll Acanthis flammea		Occasionally observed in single numbers over the site. May breed in hedgerows to the north of the site.
	SPEC 2	A flock of c. 150 birds was observed on the 25 th October 2023.
Linnet Carduelis cannabina		A flock of 20 birds was observed on the 3 rd February 2024. Flocks of Linnets are common on waste ground and open fields in Winter on the East coast of Ireland in and the birds may be immigrants from Scotland or the Northwest of England. May breed in hedgerows in small numbers, north of the site.
Goldfinch	+	Occasionally observed on all survey dates.

Species	Qualification Criteria	Comments
Carduelis carduelis		Common in Ireland and may breed in hedgerows at the north of the site.
Greenfinch Carduelis chloris	BDMp1	Five birds were observed with a large flock of c. 150 Linnets on the 25 th October 2023. A flock of fifteen was observed with a flock of Linnets on the 4 th of December 2023.
Yellowhammer Emberiza citrinella	BDp2, BDr2	Five birds were observed along a hedgerow by the northernmost stubble field on the 19 th February 2024. Two birds flew overhead at the south of the site on the same date. A scarce bird in Ireland, but can be quite frequently
Reed Bunting Emberiza schoeniclus		observed in parts of North County Dublin and Meath. Three females were observed in a hedgerow at the southwest of the site on the 4 th of November 2023.

Qualifying criteria: Red List Criteria- SPEC1 (species that are of global conservation concern). SPEC3 (species are those for which the global population is concentrated outside EuropeBDp1 (breeding population decline over shorter time periods) BDp2 (breeding population decline over longer time periods).BDr2 (breeding range decline over longer time periods)Amber List Criteria- Categories that depict an unfavourable conservation status in Europe, but not necessarily of global concern. WI (Localised non-breeding population) WDMp1 (Moderate non-breeding population decline over the short term) BDMr1 and BDMr2 (Moderate breeding range decline over short term (1) and long term(2) BDMp1 (short-term decline in breeding population), BDMp2 (long-term decline in breeding population). SPEC 2 (species for which the global population is concentrated outside of Europe)

A total of twenty-two bird species was observed during the Winter 2023/2024 bird survey. Two Red-Listed species, namely meadow pipit and yellowhammer were observed during the site visits. The two Red -Listed species may breed within the site. Three Amber-Listed species, herring gull, starling, skylark, greenfinch and linnet were observed during the site visits. The only Amber-Listed species that may breed within the site are greenfinch and linnet. All other species observed are Green-Listed, species of favourable conservation status.

5. Discussion

Birds observed at the Flemington Lane site are typical of the habitats present. The species assemblage is a reflection of the agricultural fields, hedgerows and overgrown waste ground habitats within and around the site and the birds observed are typical of birds occurring in these habitats in North County Dublin in Winter.

The agricultural grassland fields to the west of the site within the boundary of the water treatment plant were devoid of birds for the most part, with the exception of birds observed flying overhead and occasional foraging rooks when the fields were saturated due to frequent rain events.

This report is also a response to concerns that were raised about the occurrence of herring gull observed at the site in the survey of 2023, and that the occurrence of this species at the site was not considered in relation to the species being one of the qualifying interests in the newly established North-West Irish Sea Special Protection Area (SPA). A number of points need to be raised regarding the occurrence of this species at the site.

- The Winter survey report carried out in February and March 2023 mentioned that birds were observed flying overhead. It did not mention that the fields within the site were being utilised by herring gulls. Afterall, during that survey, all fields, with the exception of a field under grass, were planted with Oil Seed Rape. The following summer, the fields were under Corn. It was only when the Corn was harvested and the fields became Corn stubble fields, when the winter survey commenced, that herring gulls, and indeed corvids, such as rooks and jackdaws were present.
- The gulls only started to occur at the site when the fields were under stubble. Due to constant rain
 events, invertebrates within the soil rise to the surface, which makes it easier for gulls to feed on them.
 Most of the time the gulls were sitting, in small numbers.
- It must be noted that only one stubble field within the entire site, namely the field adjacent to the road leading up to the Water Treatment Plant, was occupied by gulls and corvids. It must be noted that during the site visits on the 4th of November and the 24th of December herring gulls were present in this particular field, in double digit numbers. The weather on these days was extremely inclement and the birds were merely sitting and sheltering from the strong winds.
- During the 18th of January site visit, it was noted that the soil within this particular stubble field had been disturbed, due to Water Treatment Plant workers installing water valves by the road. The soil had been disturbed in strips, where pipes were laid, and it was on these strips where gulls and corvids were feeding.
- It is not unusual for gull species to occur and feed in fields in inland sites. A recently ploughed field can
 attract hundreds of gulls, as indeed, a field where the first cut of silage has taken place, or any grass
 cutting in general.
- Herring gulls were present flying around the site on all monthly visits. They were also abundant flying
 over Balbriggan town. This is to be expected in any coastal town in Ireland. It is known that they breed
 on roof tops in the town and are regarded as a nuisance species by residents in the area.
- In conclusion, just because herring gulls were present within the survey site does not necessarily mean that this is their preferred habitat within the area. During the final site visit on the 11th of March, there were no herring gulls present. However, on the same date, the author observed a large number of c.3,000+ gulls, mainly comprised of herring gulls, feeding on the tideline of Gormanston Strand, located <5km northeast of the study site. The large number of gulls was present at Gormanston Strand after a north-easterly storm on Saturday the 9th of March.

6. Reference

Ref. 1 Gilbert, G, Stanbury, A. & Lewis, I K. Birds of Conservation Concern in Ireland 4: 2020–2026. Irish Birds 43: 1-23.

Appendix 2 -Site Survey

The most recent site habitat assessments were carried out on the 12th May 2023 and 27th June 2023. Habitats with the proposed development site were classified according to Fossitt (2000) (Figure 2.1) and the species noted within each habitat are described.

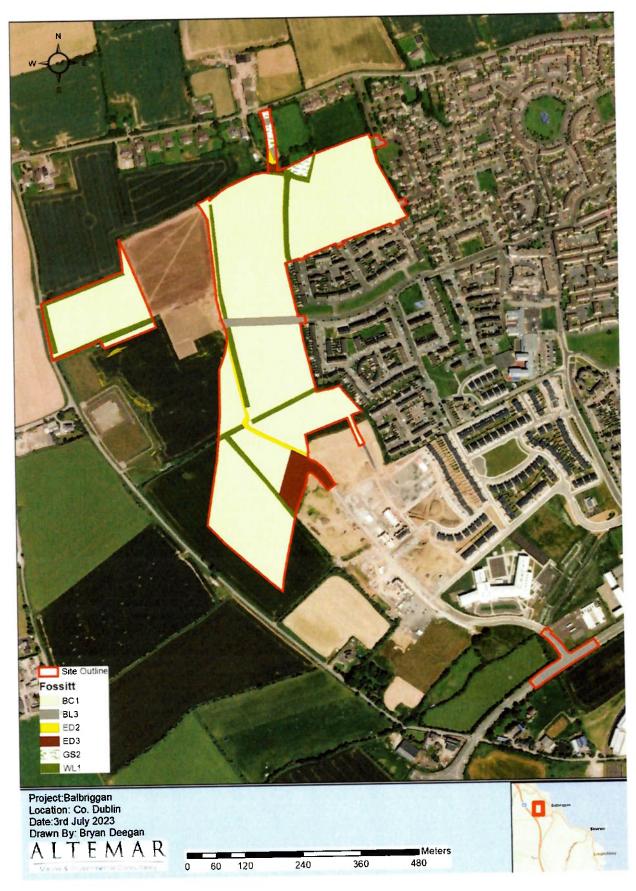


Figure 2.1 - Fossitt Habitats on site

Arable crops BC1

Arabie crops dominate the habitats. In 2023 this was dominated by a monoculture of rape (*Brassica napus*). Opportunistic flora species were present. Species noted included creeping buttercup (*Ranunculus repens*), cornflower (*Centaurea cyanus*), fat hen (Chenopodium album), corn marigold (*Glebionis segetum*), scarlet pimpernel (Anagallis arvensis), dandelion (*Taraxacum spp.*), groundsel (*Senecio vulgaris*), docks (*Rumex spp.*), plantains (*Plantago spp.*), nettle (*Urtica dioica*), prickly sowthistle (*Sonchus asper*), pineapple weed (*Matricaria discoidea*), shepherd's purse (*Capsella bursa-pastoris*) and. No species of conservation importance were noted.



Plate 1. Arable crops BC1

ED3 Recolonising Bare Ground

As can be seen from figure 5.10 in the south west portion of the site a residential development has recently been developed. Site clearance works or ploughing have been carried out which has included part of the proposed development site. In this area previously grown crops have not been replanted and therefore consists of an area of Recolonising Bare Ground. Based upon an examination of historic satellite imagery (Google Historic Imagery) works and site clearance and spoil storage commenced in the area until 2018 with the area being fully cleared in 2019 as part of the adjacent development. This site is being recolonised by opportunistic species such as rape (Brassica napus), dandelion (Taraxacum spp.), bramble (Rubus fruticosus agg.), rosebay willowherb (Chamaenerion angustifolium), clover (Trifolium spp.), docks (Rumex spp.), thistles (Cirsium arvense & C. vulgare), willowherb (Epilobium parviflorum), pineappleweed (Matricaria discoidea), plantains (Plantago spp.), hoary daisy (Bellis perennis), cat's-ear (Hypochaeris radicata), creeping buttercup (Ranunculus repens), hedge bindweed (Calystegia sepium), common vetch (Vicia sativa ssp. Segetalis), corn marigold (Glebionis segetum).



Plate 2. ED3 Recolonising Bare Ground

GS2-Dry meadows and grassy verges

In the northern portion of the site is an area of land that was previously Improved Agricultural Grassland (GA!) and in 2019 cattle were observed grazing in this area. Cattle appeared to not have grazed the habitat for several years and the habitat had become a GS2-Dry meadows and grassy verges habitat. Species clover (*Trifolium repens*), bramble (*Rubus fruticosus*), creeping buttercup (*Ranunculus repens*), thistles (*Cirsium arvense*, *C. vulgare*), common ragwort (Senecio jacobaea), dandelion (*Taraxacum spp.*), docks (*Rumex spp.*), daisy (*Bellis perennis*), plantains (*Plantago spp.*), nettle (*Urtica dioica*), cat's-ear (*Hypochaeris radicata*), and hedge bindweed (*Calystegia sepium*) proximate to the hedgerows. Bramble (Rubus fruticosus) had begun to encroach at the edges of the habitat.



Plate 3. GS2-Dry meadows and grassy verges

Hedgerows were noted within the site on the field boundaries (Plate 4 & 5). These varied significantly in their condition and have been unmanaged for several years. Proximate to the building to the north of the site a cluster of a mature ash (*Fraxinus excelsior*) (with ash dieback noted) formed the field boundaries. The remainder of the site had more traditional hedgerows. However, the condition varied considerably from linear mature traditional hedgerow (Plate 4) to fractured hedgerow dominated by bramble (plate 5). Species including elder (*Sambucus nigra*), blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), holly (*Ilex aquifolium*), common fumitory (*Fumaria officinalis*), dog-rose (*Rosa canina*), bramble (*Rubus fruticosus agg.*), hedge bindweed (*Calystegia sepium*), cleavers (*Galium aparine*), sycamore (*Acer pseudoplatanus*), ash (*Fraxinus excelsior*), ivy (*Hedera helix*) and cleavers (*Galium aparine*) were noted.



Plate 4. Intact hedgerow (top). Plate 5. Relatively poor hedgerow with bramble.

BL3- buildings and artificial surfaces

Bu .gs and artificial surfaces consist of roads including a newly constructed road which traverses the site (Plate 6). A derelict house (Plate 7) and a metal barn (Plate 8) are located to the north of the site. Bat assessments were carried out and no bats were noted roosting in the buildings on site. It is important to note however that approximately 16 barn swallows (Hirundo rustica) (Amber listed) were nesting in the metal barn.





Plate 6. New rosd. Plate 7. Derelict house



Plate 8. Metal barn with nesting barn swallows.

Bird Species noted in the vicinity of the proposed development during Alternar surveys:

Common Name	Scientific Name	BoCCI
Starling	Sturnus vulgaris	Amber
Great tit	Parus major	Green
Woodpigeon	Columba palumbus	Green
Goldfinch	Carduelis carduelis	Green
Herring Gull	Larus argentatus (flying)	Amber
Hooded crow	Corvus cornix	Green
Wren	Troglodytes troglodytes	Green
Blackbird	Turdus merula	Green
Robin	Erithacus rubecula	Green
Swallow	Hirundo rustica (breeding)	Amber
Chaffinch	Fingilla coelebs	Green
Dunnock	Prunella modularis	Green
Linnet	Carduelis cannabina	Amber
House Sparrow	Passer domesticus	Amber
Skylark	Alauda arvensis	Amber
Meadow Pipit	Anthus pratensis	Red