SCOTT CAWLEY

Natura Impact Statement

For Project West, Knockharley Landfill, Co. Meath

prepared for AWN Consulting Ltd

on behalf of Beauparc Utilities Limited

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Document Control

Project Title	Project West		**Project No.**	240116
Document Title	Natura Impact Statement		**Status**	Draft
Revision	**Issue Date**	**Author**	**Reviewed By**	**Approved By**
D01	05/08/2025	JB	CF	TR

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1 Introduction

1 This Natura Impact Statement (NIS) has been prepared by Scott Cawley Ltd., for the applicant, Beauparc Utilities Limited, who is seeking permission for the Proposed Development comprising the construction of an additional active void space of 3.38 million m^3 for landfilling, the relocation of an existing 220kV overhead ESB powerline which traverses the site, and diversion of the existing Knockharley Stream (EPA Name: Flemingstown 08, EPA Code: 08F05) to the outer extent of the expanded landfill void.

2 This NIS has been prepared in accordance with the provisions of Part XAB of the Planning and Development Act, 2000 (as amended) and in accordance with the requirements of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive).

3 It considers the implications of the Proposed Development, on its own and in combination with other plans or projects, for European sites[1] in view of the conservation objectives of those sites. It includes a scientific examination of evidence and data to identify and assess the implications of the Proposed Development for any European sites in view of the conservation objectives of those sites. The NIS considers whether the Proposed Development, by itself and in combination with other plans or projects, would adversely affect the integrity of any European sites. In reaching a conclusion in this regard consideration is given to any mitigation measures necessary to avoid or reduce any potential negative impacts.

4 This NIS has been prepared following an assessment in view of best scientific knowledge of the potential for, the Proposed Development to have significant effects, either individually or in combination with other plans or projects on European sites, set out in an Appropriate Assessment (AA) Screening Report (Scott Cawley Ltd., 2025a).

5 The purpose of this NIS is to provide an examination, analysis and evaluation of the potential impacts of the Proposed Development on European sites and to present findings and conclusions with respect to the Proposed Development in light of the best scientific knowledge in the field. This NIS will inform and assist the competent authority, in carrying out its Appropriate Assessment as to whether or not the Proposed Development will adversely affect the integrity of any European sites, either alone or in combination with other plans and projects, taking into account their conservation objectives.

6 The Proposed Development is neither connected with nor necessary to the management of any European sites.

7 It is the considered view of the authors of this NIS (Scott Cawley Ltd.), that, following the effective implementation of the mitigation measures proposed in Section 6.1.4 the Proposed Development will not, individually or in combination with other plans or projects, have any adverse effect on the integrity of any European sites in view of their conservation objectives.

2 Legislative Context

8 The Birds and Habitats Directives - Council Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (the Birds Directive) and Council Directive 92 /43 /EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (the Habitats Directive) – require Ireland to establish protected sites as part of a European wide network of sites (the Natura 2000 network which are known in Ireland as European sites) for habitats and species that are of

[1] The Natura 2000 network of sites are defined under the Habitats Directive (Article 3) as a European ecological network of Special Areas of Conservation, composed of sites hosting the natural habitat types listed in Annex I and species listed in Annex II, and Special Protection Areas classified pursuant to the Birds Directive (2009/147/EC). The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. In Ireland, these sites are designed as *European sites* – as defined under the Planning and Development Acts and/or Birds and Habitats Regulations as (a) a site of Community importance, (b) a site of Community importance, (c) a Special Area of Conservation, (d) a Special Area of Conservation, (e) a Special Protection Area, or (f) a Special Protection Area. They are commonly referred to in Ireland as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

international importance for conservation. In Ireland, European sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). SACs are selected for habitats listed on Annex I of the Habitats Directive (including priority Annex I habitat types which are in danger of disappearance) and species listed on Annex II. SPAs are selected for bird species (listed on Annex I of the Birds Directive), regularly-occurring populations of migratory bird species (such as ducks, geese and waders), and areas of international importance for migratory birds. The specified habitats and species for which each SAC and SPA is selected, correspond to the Qualifying Interests (in the case of SACs) or Special Conservation Interest species (in the case of SPAs) for the sites, for which conservation objectives are prepared.

9 Article 6(3) of the Habitats Directive states that:

> "*Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent 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*."

10 This provision is transposed into Irish law by Part XAB of the Planning and Development Acts 2000 as amended. Section 177U(4) of the said Acts provides for screening for Appropriate Assessment as follows:

> *"The competent authority shall determine that an appropriate assessment of [...] a proposed development [...] is required if it cannot be excluded, on the basis of objective information, that the [...] proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site."*

11 Section 177U(5) provides as follows:

> *"The competent authority shall determine that an appropriate assessment of a […] proposed development, […], is not required if it can be excluded, on the basis of objective information, that the […] proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site."*

12 Section 177T(1) and (2) provide that a NIS is "*a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own or in combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites' and specifies that it shall include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for one or more than one European site in view of the conservation objectives of the site or sites*."

13 The Court of Justice of the European Union (CJEU) has made a number of rulings in relation to Appropriate Assessment, regarding when it is required, its purpose and the standards it should meet. Two of the key rulings include, Case C-127/02 Waddenzee where the CJEU found that "*Any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects*" and that the plan or project may only be authorised "*where no reasonable scientific doubt remains as to the absence of such effects"*, and Case C-258/11 where the CJEU found that "*[The Appropriate Assessment] cannot have lacunae and must contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the works proposed on the protected site concerned*."

14 Consideration has been given in the preparation of this NIS to the evolution in interpretation and application of directives and national legislation arising from jurisprudence of the European and Irish courts, in respect of Article 6 of the Habitats Directive.

3 Methodology

3.1 Scientific and Technical Competence Relied Upon

15 This NIS was authored by Jared Bennett, and reviewed by Caitriona Fenton and Tim Ryle of Scott Cawley Ltd. The background and experience of the author and contributors to this report are set out below.

Jared Bennett

16 Jared Bennett is a Senior Consultant Ecologist with Scott Cawley Ltd., and is a Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM). He obtained a Master's degree in Environmental Science from University College Dublin. Since joining Scott Cawley Ltd., he has carried out field surveys on major road schemes for protected species including bat, wintering birds, and marsh fritillary, and has conducted habitat and invasive plant species surveys. Jared has experience in Ecological Impact Assessment and Appropriate Assessment reports and was the author of this report. Jared is the Project Manager in the delivery of the Biodiversity Assessments for the Proposed Development.

Caitriona Fenton

17 Caitriona Fenton is a Senior Ecologist with Scott Cawley Ltd. since September 2024. She has over 10 years of experience in ecological consultancy. She has worked on the full suite of consultancy reports (AA scr/NIS/EcIA, biodiversity chapters) for both small and large projects, including road schemes, tech, pharmaceutical, residential and public sectors. She has good experience carrying out preliminary ecological assessments for projects in a wide range of sectors – roads, housing, power, rail, water infrastructure, defence, education and healthcare in the UK. She is an experienced terrestrial ecologist and carries out surveys for bats, breeding birds, badgers, otters, water vole, amphibians and reptiles and habitat classification. She project managed ecological impact assessments for EIA / non-EIA schemes. She is experienced in the design and delivery of mitigation for bats, amphibians and enhancements for biodiversity.

Tim Ryle

Tim Ryle is an Associate Director with Scott Cawley Ltd. He holds an honours degree in Botany from University College Dublin and was later awarded a Ph.D. from the same institution. He is a full Member of the Institute of Environmental Scientists. Tim is an experienced ecological consultant with over twenty years' experience in private consultancy in designing, undertaking and managing a wide range of ecological surveys and in assessing impacts and designing mitigation measures and biodiversity enhancements, in particular for protected species including badgers, otters, bats, birds, amphibians as well as habitats of conservation importance. He is also experienced in undertaking Appropriate Assessment for small-scale development projects and larger infrastructural projects, land plans, and national/government plans.

3.2 Guidance and Approach

18 This NIS has been prepared having regard to the following documents.

<u>European Commission Guidance</u>

- *Assessment of Plans and Projects in Relation to Natura 2000 sites: Methodological Guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission, 2021);
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019);

- *Communication from the Commission on the Precautionary Principle* (European Commission 2000)[2];
- *Nature and Biodiversity Cases – Ruling of the European Court of Justice* (European Commission 2006);
- *Article 6 of the Habitats Directive – Rulings of the European Court of Justice* (European Commission Final Draft September 2014); and
- Interpretation Manual of European Union Habitats. Version EUR 28. (European Commission, 2013).

Irish Guidance

- *Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities* (Department of Environment, Heritage and Local Government 2010 revision)
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. *Circular NPW 1/10 & PSSP 2/10* (NPWS, 2010)
- *OPR Practice Note PN01. Appropriate Assessment Screening for Development Management* (Office of the Planning Regulator, 2021)

19 In addition, regard has been had to the following guidance in characterising impacts, including determining magnitude and significance of impacts, as relevant in the application to Appropriate Assessment and European sites:

- *Guidelines for Ecological Impact Assessment in the UK and Ireland V1.3* (Chartered Institute of Ecology and Environmental Assessment, 2018)

3.3 Assessment Methodology

20 The assessment presented in this NIS has been undertaken with respect to the requirements of Article 6(3) of the Habitats Directive and in consideration of all potential impact sources and pathways connecting the Proposed Development to European sites, in view of the conservation objectives supporting the conservation condition of all European sites' QIs / SCIs, as detailed below.

21 The Proposed Development (including the proposed design, construction methodologies and operational effects) was analysed and assessed to identify the potential impacts associated with the Proposed Development that could affect the ecological environment.

22 From this, the zone of influence of the Proposed Development was defined, as is discussed further below. Based on the identified impacts, and their zone of influence, the European sites potentially at risk of any direct or indirect impacts were identified.

23 In establishing which European sites are potentially at risk (in the absence of mitigation) from the Proposed Development, a source-pathway-receptor approach was applied. In order for an impact to occur, there must be a risk enabled by having a source (e.g. water abstraction or construction works), a receptor (e.g. a

[2] The precautionary principle is a guiding principle that derives from Article 191 of the Treaty on the Functioning of the European Union and has been developed in the case law of the European Court of Justice (e.g. ECJ case C-127/02 – Waddenzee, Netherlands).

This guidance document notes that the precautionary principle "*covers those specific circumstances where scientific evidence is insufficient, inconclusive or uncertain and there are indications through preliminary objective scientific evaluation that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the chosen level of protection*".

Applying the precautionary principle in the context of screening for appropriate assessment requires that where there is uncertainty or doubt about the risk of significant effects on a European site(s), it should be assumed that significant effects are likely and AA must be carried out.

European site or its Qualifying Interest(s) (QIs) or Special Conservation Interest(s) (SCIs) species), and a pathway between the source and the receptor (e.g. pathway by air for air borne pollution, or a pathway by a watercourse for mobilisation of pollution). For an impact to occur, all three elements must exist; the absence or removal of one of the elements means there is no possibility for the impact to occur.

24 The identification of source-pathway-receptor connection(s) between the Proposed Development and European sites essentially is the process of identifying which European sites are within the zone of influence of the Proposed Development, and therefore potentially at risk of significant effects. The zone of influence is defined as the area within which the Proposed Development could affect the receiving environment such that it could potentially have significant effects on the QI habitats or QI/SCI species of a European site, or on the achievement of their conservation objectives (as defined in CIEEM, 2018).

25 The identification of a source-pathway-receptor risk does not automatically mean that significant effects will arise. The likelihood of significant effects will depend upon the characteristics of the source (e.g. extent and duration of construction works), the characteristics of the pathway (e.g. direction and strength of prevailing winds for air borne pollution) and the characteristics of the receptor (e.g. the sensitivities of the European site and its QIs/SCIs). However, identification of the risk does mean that there is a possibility of ecological or environmental damage occurring, with the significance of the effect depending upon the nature and exposure to the risk and the characteristics of the receptor. In this case, where there is uncertainty, the precautionary principle has been applied.

26 This assessment has been undertaken in consideration of all potential impact sources and pathways connecting the Proposed Development to European sites, in view of the conservation objectives supporting the conservation condition of the sites' QIs/SCIs.

27 The conservation objectives relating to each European site and its QIs/SCIs are expressed generally for SACs as "*to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected*", and for SPAs "*to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA*".

28 Following on from this, and as defined in the Habitats Directive, favourable conservation status (or condition, at a site level) of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing;
- the specific structure and functions which are necessary for its long-term maintenance exist; and, are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

29 The favourable conservation status (or condition, at a site level) of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and,
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

30 Where site-specific conservation objectives have been prepared for a given European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured, i.e. an impact which affects the achievement of favourable conservation condition, as measured by the attributes and targets, is an impact on site integrity.

31 In the case of some QIs/SCIs in certain European sites, the conservation objective is to restore rather than maintain conservation condition and this distinction is taken into account in the assessment; as is any legacy damage to European sites that has occurred since their designation, insofar as possible.

3.4 Desktop Study

32 The desktop data sources used to inform the assessment presented in this report are as follows (accessed in August 2025):

- Online data available on European sites and protected habitats/species within 10km of the Proposed Development as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie[3], including conservation objectives documents. The use of a 10km radius for desk studies is frequently applied to evaluate potential impacts on protected species, habitats, and the surrounding landscape. A 10km radius allows for the capture of relevant data on species that may use habitats in the area surrounding the Proposed Development site. This distance is useful for species with broader ranges, like certain bird or mammal species, and also helps identify potential corridors or linkages between habitats. It allows for the consideration of species that may be present in the broader landscape while focusing on those that are most likely to be impacted by activities within the development area.
- Online data available on protected species as held by the National Biodiversity Data Centre (NBDC) from www.biodiversityireland.ie
- Information on the surface water network and surface water quality in the area available from www.epa.ie
- Information on soils, geology and hydrogeology in the area available from the Geological Survey Ireland (GSI) online Spatial Resources service. Available from https://www.gsi.ie/en-ie/data-and-maps/Pages/Groundwater.aspx
- Ordnance Survey of Ireland mapping and aerial photography available from https://www.geohive.ie/
- Information on the location, nature and design of the Proposed Development supplied by the applicant's design team, including Chapter 6 (Hydrology and Hydrogeology), and Chapter 11 (Landscape and Visual Site Assessment).
- Information on the conservation status of birds in Ireland from Birds of Conservation Concern in Ireland (Gilbert *et al.*, 2021)

3.5 Baseline Surveys

33 Baseline ecological surveys were undertaken to inform environmental assessments of the Proposed Development. This section describes all ecological surveys performed by Scott Cawley Ltd. which are relevant to and have informed the assessment of likely significant effects on European sites, presented in this NIS. Surveys were carried out between September 2024 and May 2025. It is noted that some surveys listed in Table 1 are not relevant to the AA process but are captured under the assessment in the Chapter 7 - Biodiversity of the EIAR.

34 Table 1 lists the survey details. It is noted that some surveys listed in Table 1 are not relevant to the AA process but are captured under the assessment in the Chapter 7 - Biodiversity of the EIAR.

Table 1 : Ecological Surveys, Survey Dates and Surveyors

Survey	Survey Date(s)
Habitat Surveys	24 September 2024, 14 May 2025

[3] The following SAC and SPA GIS boundary datasets are the most recently available at the time of writing: SAC_ITM_2024_12 and SPA_ITM_2024_01.

Survey	Survey Date(s)
Invasive Plant Species Surveys	24 September 2024, 14 May 2025
Terrestrial Fauna (excluding bats)	24 September 2024, 14 May 2025
Small Stream Risk Score (SSRS)	3, 4, and 11 December 2024
Bat Activity Surveys	18 September 2024, 24 September 2024, 4 October 2024, 9 October 2024, 22 April 2025, 13 May 2025
Ground-level Tree Assessment	25 March 2025
Breeding Bird Surveys	20 March 2025, 2 May 2025, 28 May 2025
Wintering Bird Surveys	24 September 2024, 23 October 2024, 20 November 2024, 20 December 2024, 20 January 2025, 20 February 2025, 19 March 2025
Kingfisher Surveys	19 March 2025, 16 April 2025, 13 May 2025

3.5.1 Habitats and Flora

35 A habitat survey of the Proposed Development site was undertaken on 24 September 2024, following the methodology described in *Best Practice Guidance for Habitat Survey and Mapping*[4]. An addition survey was performed on 14 May 2025 to confirm results, as the initial survey was performed late in September which was suboptimal for verifying habitats and flora species. All habitat types were classified using the *Guide to Habitats in Ireland*[5], and recording any species of conservation interest. Vascular and bryophyte plant nomenclature generally follow that of *The National Vegetation Database*[6], having regard to more recent taxonomic changes to species names after *the New Flora of the British Isles*[7] and the British Bryological Society's *Mosses and Liverworts of Britain and Ireland: A Field Guide*[8].

3.5.2 Small Stream Risk Score Survey

36 A Small Stream Risk Score (SSRS) survey was undertaken by Scott Cawley Ecologists on 3, 4 and 11 December 2024, following the methodology described *SSRS Training Manual – a Pollution Investigation Tool for Use in the Field*[9]. Samples were collected from the four stream and river sites by means of a two-minute kick sample, collecting all macroinvertebrates in a 1mm pond net attached to a metal frame.

3.5.3 Terrestrial Mammals (excluding bats)

37 A terrestrial fauna survey was undertaken by Scott Cawley Ecologists on 24 September 2024 and 14 May 2025. The presence/absence of terrestrial fauna species were surveyed through the detection of field signs such as tracks, markings, feeding signs, and droppings, as well as by direct observation. The habitats on site

[4] Smith, G.F., O'Donoghue, P., O'Hora, K. & Delaney, E. (2011) *Best Practice Guidance for Habitat Survey and Mapping*. The Heritage Council Church Lane, Kilkenny, Ireland.

[5] Fossitt, J.A. (2000) A Guide to Habitats in Ireland. Heritage Council, Kilkenny.

[6] Weekes, L.C. & FitzPatrick, Ú. (2010) *The National Vegetation Database: Guidelines and Standards for the Collection and Storage of Vegetation Data in Ireland.* Version 1.0. Irish Wildlife Manuals, No. 49. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

[7] Stace, C. (2019) *New Flora of the British Isles*. *4th Edition*. C&M Floristics.

[8] Atherton, I., Bosanquet, S. & Lawley, M. (2010) *Mosses and Liverworts of Britain and Ireland: A Field Guide*. Latimer Trend & Co., Plymouth.

[9] Small Streams Risk Score (SSRS) Training Manual – A Pollution Investigation Tool for Use in the Field – White Young Green, February 2009

were assessed for signs of usage by protected/red-listed fauna species, and their potential to support these species. Surveys included checks for the presence of badger setts and otter holts within the subject lands, and to record any evidence of use. Evidence of terrestrial mammals observed during other surveys was also recorded.

3.5.4 Bats

38 A ground-level tree assessment was conducted to evaluate the suitability of buildings and vegetation within the Proposed Development site for supporting roosting bats and their potential importance for commuting and foraging bats. This assessment was based on guidelines from *Bat Surveys for Professional Ecologists: Good Practice Guidance*[10], as detailed in Table 2: Guidelines for assessing the potential suitability of subject lands for bats, based on the presence of habitat features within the landscape, applied according to professional judgement. (Taken from Collins (2023))Table 2. The evaluation included inspections of buildings and trees for potential roost features (PRFs), looking for signs of bats such as staining at roost entrances, droppings, carcasses, and insect remains.

39 Four activity surveys were performed in on the September 2024 and May 2025 which covered the Proposed Development site, as well as the placement of automated detectors on the September 2024, October 2024, April 2025, and May 2025.

Table 2: Guidelines for assessing the potential suitability of subject lands for bats, based on the presence of habitat features within the landscape, applied according to professional judgement. (Taken from Collins (2023))

Suitability	Description of Roosting Habitats	Commuting and Foraging Habitats
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels	No habitat features on site likely to be used by any commuting or foraging bats at any time of the year (i.e. no habitats that provide continuous lines of shade/protection for flight-lines, or generate/shelter insect populations available to foraging bats).
Negligible[a]	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.	No obvious habitat features on site likely to be used as flight-paths or by foraging bats; however, a small element of uncertainty remains in order to account for non-standard bat behaviour.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[b] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats[c]).	Habitat that could be used by small numbers of bats as flight-paths such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size,	Continuous habitat connected to the wider landscape that could be used by bats for flight-paths

[10] Collins, J. (2023) *Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th Edition.*

	shelter, protection, conditions[b] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).	such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[b] and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by bats for flight-paths such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Proposed Development is close to and connected to known roosts.

a) Negligible is defined as 'so small or unimportant as to be not worth considering, insignificant'. This category may be used where there are places that a bat could roost or forage (due to one attribute) but it is unlikely that they actually would (due to another attribute).

b) For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.

c) Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al*., 2016 and Jansen *et al*., 2022). Common pipistrelle swarming has been observed in the UK (Bell, 2022 and Tomlinson, 2020) and winter hibernation of numbers of this species has been detected at Seaton Delaval Hall in Northumberland (National Trust, 2018). This phenomenon requires some research in the UK, but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in prominent buildings in the landscape, urban or otherwise.

3.5.5 Breeding birds

40 Breeding bird surveys were undertaken on the 20 March 2025, 2 May 2025, and 21 May 2025 by Scott Cawley Ecologists, using a methodology adapted from the *Bird Monitoring Methods - A Manual of Techniques for Key UK Species* (Gilbert *et al*., 2011). The study area covered the Proposed Development site. Surveys commenced at dawn and lands within the study area were slowly walked in a manner allowing the surveyor to come within 50m of all habitat features. Birds were identified by sight and song, and general location and activity were recorded using the British Trust for Ornithology (BTO) species and activity codes.

3.5.6 Wintering Birds

41 A full season of wintering bird surveys were undertaken on 24 September 2024, 23 October 2024, 20 November 2024, 20 December 2024, 20 January 2025, 20 February 2025, and 19 March 2025 by Scott Cawley Ecologists, using a methodology adapted from the *Bird Monitoring Methods - A Manual of Techniques for Key UK Species* (Gilbert *et al*., 2011). The study area covered the lands within the Proposed Development site. Lands were surveyed visually using binoculars from a vantage point(s) at the edge of the study area followed by a walkover of the area to identify birds which may not be visible from a distance (e.g. waders) and evidence of usage by wildfowl such as swans or geese (e.g. droppings). Birds were identified by sight and general location and activity were recorded using the British Trust for Ornithology (BTO) species and activity codes.

3.5.7 Kingfisher Surveys

42 Dedicated kingfisher surveys were undertaken by Scott Cawley Ecologists on 19 March 2025, 16 April 2025, and 13 May 2025, following with the approach adopted from recommendations contained in the NRA publication *Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes*[11]. The survey methodology comprised of walked transects along the accessible sections of the Knockharley Stream bank(s) and vantage point watches of potentially suitable kingfisher nesting habitat shortly after dawn. If observed, nest holes, perches, resting places and individual birds were recorded and mapped. If nest holes were identified they were categorised as active when Kingfisher activity was reported near the hole and/or fresh droppings were present at the entrance(s).

3.6 Consultations

43 The following organisations with relevance to biodiversity were consulted:

- Inland Fisheries Ireland (IFI)

44 Correspondence in the form of email was received from IFI on the 15 May 2025, indicating that IFI were satisfied in principle with the proposed stream diversion plans and had no further queries.

4 Receiving Environment

45 The following sections provide information to facilitate the Natura Impact Statement of the Proposed Development to be undertaken by the competent authority.

46 A description of the Proposed Development and the receiving environment is provided to identify the potential ecological impacts. The environmental baseline conditions are discussed, as relevant to the assessment of ecological impacts where they may highlight potential pathways for impacts associated with the Proposed Development to affect the receiving ecological environment (e.g. geological, hydrogeological and hydrological data).

47 The potential impacts are examined in order to define the potential zone of influence of the Proposed Development on the receiving environment. This then informs the assessment of whether the Proposed Development will result in significant effects on any European sites; i.e. affect the conservation objectives supporting the favourable conservation condition of the European site's QIs or SCIs.

4.1 Description of the Proposed Development

4.1.1 Construction Phase

48 The site covers an area of 135.2 ha and is predominantly comprised of land used for a landfill (Figure 1). The Proposed Development entails of the expansion of the existing landfill site, with the construction of an additional void space of 4.12 million m^3 for landfilling.

The construction phase is divided into seven phases over 21 years.

- Phase 1 will develop the site for the future construction programme within the first two years of construction, and involves site clearance, berm construction, diversion of Knockharley Stream, installation of surface water infrastructure, and the development of landfill cells 31-32.
- Phase 2 will involve the development of landfill cells 33-34 over 2 years.
- Phase 3 will involve the development of landfill cells 35-36 over 2 years, and capping of cells 31-32.

[11] National Roads Authority (NRA) (2009). Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes.

- Phase 4 will involve the development of landfill cells 37-38 over 2 years, and capping of cells 33-34.
- Phase 5 will involve the development of landfill cell 39 over 2 years, and capping of cells 35-36.
- Phase 6 will involve the development of landfill cell 40 over 2 years, and capping of cells 37-38.
- Phase 7 will involve the capping of cells 39-40.

49 As part of the creation of the void space, additional works include;

- Relocation of an existing 220kV overhead ESB powerline which traverses the site to the western boundary of the site, to accommodate development of the expanded landfill void.
- Diversion of the existing Knockharley Stream to the outer extent of the expanded landfill void. The diverted stream will be unculverted with the exception of existing access road crossings.
- Amendment and extension of 10m high permitted screening berms (ABP Ref: 303211) along the western planning boundary to revise the berm profile and extend the extent of berm. The proposed amended berm will have a total berm footprint of approximately 16.4ha.
- Felling of approximately 12.6 ha of the existing commercial broadleaf/conifer mix plantations to facilitate the Proposed Development.
- Replanting and new planting totalling approximately 8.86ha to off-set loss of commercial forestry on the proposed development site, along with an additional 4.04 ha planted off site.
- Planting around the periphery of the screening berms.
- The old void cells will be capped and planted in what is currently the permitted development.

50 The Proposed Development will also provide for all associated site development works, infrastructure, excavation and clearance works including decommissioning of the existing void.

4.1.2 *Operational Phase*

51 As the Construction Phase is divided into seven phases over 21 years, the Operational Phase of the Proposed Development will continue with waste being disposed in the existing landfill cell during the construction of new landfill cells. After the landfill is remediated, the site will remain operational for the IBA facility and Biological treatment facility. The main characteristics of the Operational Phase of the Proposed Development that have potential for ecological impact are:

- The presence of traffic delivering waste to the landfill cells.
- Water degradation.
- Routine maintenance and landscaping.

Figure 1 Red line boundary of the Proposed Development.

4.2 European Sites

52 The Proposed Development lands are not located within any European sites, it is however hydrologically connected downstream to European sites, namely the River Nanny Estuary and Shore SPA and the North-West Irish Sea SPA. The Knockharley Stream which intersects the Proposed Development joins with the River Nanny *c*. 2.8km downstream, and therefore provides a hydrological connection to downstream European sites. All other marine SPAs within the North-west Irish Sea (e.g. Lambay island SPA and Rockabill SPA) are not included in this assessment as according to the Hydrology Chapter of the EIAR[12] the perceptible impacts from construction are negative at a local geographic scale, and therefore given dilution and mixing in the marine environment, the Proposed Development would not give rise to a pollution event of a magnitude that would have any perceptible effect on water quality in the Irish Sea.

The European sites present in the vicinity of the Proposed Development are listed in Table 3, along with their Qualifying Interests/Special Conservation Interests and proximity to the Proposed Development, and shown on

53 Figure 2.

[12] EIAR Chapter 6 Hydrology and Hydrogeology, Project West.

Table 3: European sites in the vicinity of the Proposed Development

European Site Name [Code]	Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site
Special Area of Conservation (SAC)		
River Boyne and River Blackwater SAC [002299)	099 River Lamprey *Lampetra fluviatilis* 1106 Salmon *Salmo salar* 1355 Otter *Lutra lutra* 7230 Alkaline fens 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*)* NPWS (2021) Conservation Objectives: River Boyne and River Blackwater SAC 002299. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage. S.I. No. 451/2024 - European Union Habitats (River Boyne and River Blackwater Special Area of Conservation 002299) Regulations 2024	Approximately 4.2km north of the Proposed Development site.
Boyne Coast and Estuary SAC [001957]	1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1310 *Salicornia* and other annuals colonizing mud and sand 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) 1410 Mediterranean salt meadows (*Juncetalia maritimi*)[13] 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes') 2130 Fixed coastal dunes with herbaceous vegetation ('grey dunes')* NPWS (2012a) Conservation Objectives: Boyne Coast and Estuary SAC 001957. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht. S.I. No. 433/2021 - European Union Habitats (Boyne Coast and Estuary Special Area of Conservation 001957) Regulations 2021	Approximately 15.9km east of the Proposed Development site.
Special Protection Area (SPA)		
River Boyne and River Blackwater SPA [004232]	A229 Kingfisher *Alcedo atthis* NPWS (2024) Conservation Objectives: River Boyne and River Blackwater SPA 004232. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage. S.I. No. 462/2012 - European Communities (Conservation of Wild Birds (River Boyne and River Blackwater Special Protection Area 004232)) Regulations 2012	Approximately 4.4km north of the Proposed Development site.
Boyne Estuary SPA [004080]	A048 Shelduck *Tadorna tadorna* A130 Oystercatcher *Haematopus ostralegus* A140 Golden Plover *Pluvialis apricaria*	Approximately 14.7km east of the Proposed Development site.

[13] The status of Mediterranean salt meadows (*Juncetalia maritimi*) as a qualifying Annex I habitat for Boyne Coast and Estuary SAC is currently under review. The outcome of this review will determine whether a site- specific conservation objective is set for this habitat.

European Site Name [Code]	Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site
	A141 Grey Plover *Pluvialis squatarola* A142 Lapwing *Vanellus vanellus* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A156 Black-tailed Godwit *Limosa limosa* A162 Redshank *Tringa totanus* A169 Turnstone *Arenaria interpres* A195 Little Tern *Sterna albifrons* A999 Wetlands NPWS (2013) Conservation Objectives: Boyne Estuary SPA 004080. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht. S.I. No. 626/2011 - European Communities (Conservation of Wild Birds (Boyne Estuary Special Protection Area 004080)) Regulations 2011.	
River Nanny Estuary and Shore SPA [004158]	A130 Oystercatcher *Haematopus ostralegus* A137 Ringed Plover *Charadrius hiaticula* A140 Golden Plover *Pluvialis apricaria* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A184 Herring Gull *Larus argentatus* A999 Wetlands NPWS (2012b) Conservation Objectives: River Nanny Estuary and Shore SPA 004158. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht. S.I. No. 140/2012 - European Communities (Conservation of Wild Birds (River Nanny Estuary and Shore SPA 004158)) Regulations 2012.	Approximately 16.7km east and 21.5km downstream of the Proposed Development site.
North-West Irish Sea SPA [004236]	A001 Red-throated Diver *Gavia stellata* A003 Great Northern Diver *Gavia immer* A009 Fulmar *Fulmarus glacialis* A013 Manx Shearwater *Knockharley NIS* A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A065 Common Scoter *Melanitta nigra* A179 Black-headed Gull *Chroicocephalus ridibundus* A182 Common Gull *Larus canus* A183 Lesser Black-backed Gull *Larus fuscus* A184 Herring Gull *Larus argentatus* A187 Great Black-backed Gull *Larus marinus* A188 Kittiwake *Rissa tridactyla* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* A195 Little Tern *Sterna albifrons* A199 Guillemot *Uria aalge*	Approximately 18.7km east and 27.8km downstream of the Proposed Development site.

European Site Name [Code]	Qualifying interest(s) / Special Conservation Interest(s) (*Priority Annex I Habitats)	Location Relative to the Proposed Development Site
	A200 Razorbill *Alca torda* A204 Puffin *Fratercula arctica* A862 Little Gull *Hydrocoloeus minutus* NPWS (2023b) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage. *No S.I Documents*	

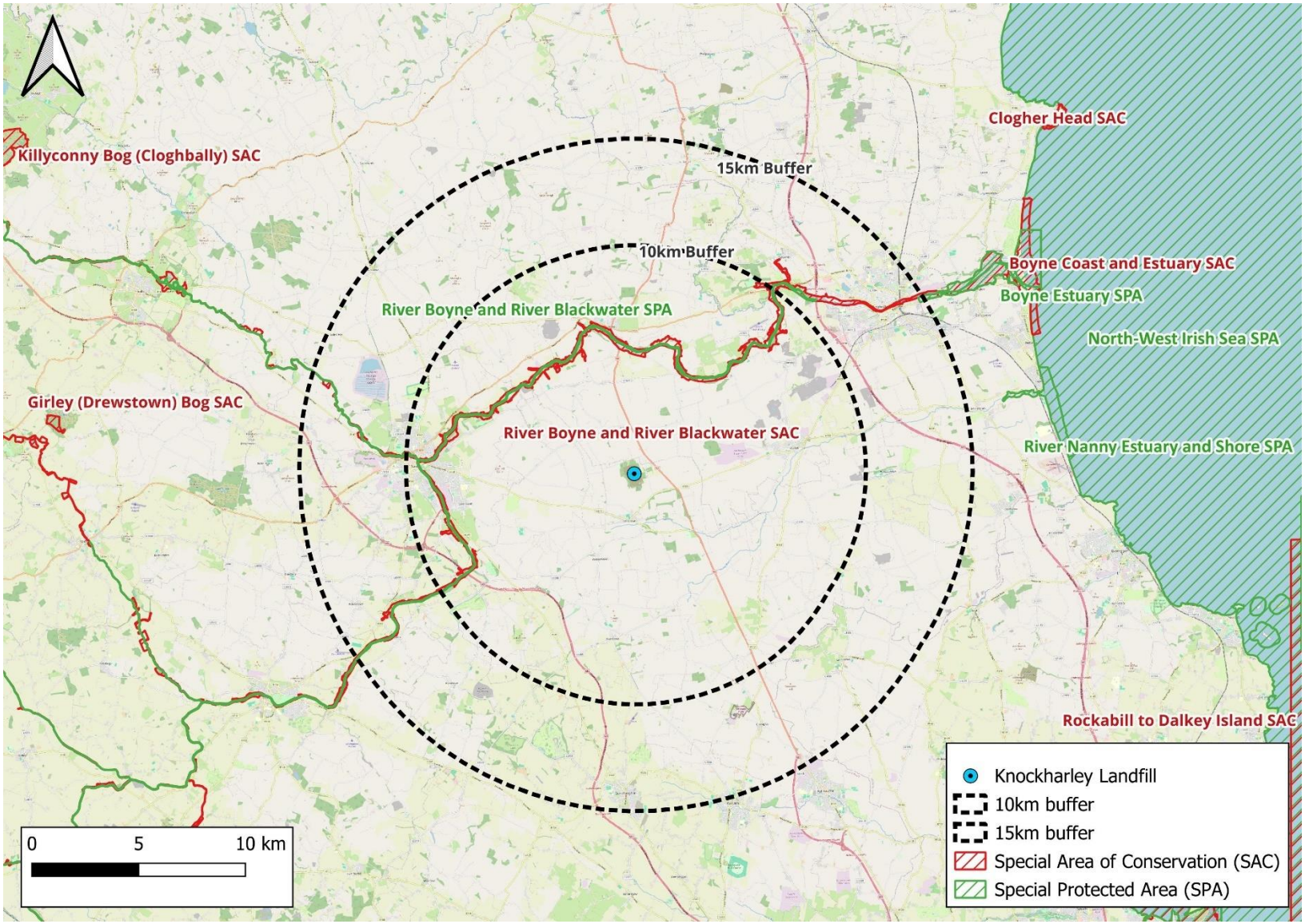

Figure 2: European sites within the vicinity of the Proposed Development

4.3 Habitats

54 The results of the habitat surveys within the site are described below by habitat type after Fossitt (2000). The habitats described below relate to habitat areas within or adjacent to the Proposed Development.

55 Each habitat identified within the Proposed Development was classified according to Fossitt (2000) and their corresponding level of ecological importance was determined in accordance with CIEEM (2024) and NRA (2009) guidelines.

56 The habitat types recorded along the footprint of the Proposed Development, are as follows:

- Buildings and artificial surfaces (BL3);
- Exposed sand, gravel or till (ED1);
- Spoil and bare ground (ED2);
- Recolonising bare ground (ED3);
- Other artificial lakes and ponds (FL8);
- Reed and large sedge swamps (FS1);
- Depositing/Lowland Rivers (FW2);
- Drainage ditches (FW4);
- Improved Agricultural grassland (GA1);
- Amenity grassland (Improved) (GA2);
- Dry meadows and grassy verges (GS2);
- Wet grassland (GS4);
- (Mixed) broadleaved woodland (WD1);
- Mixed broadleaved/conifer woodland (WD2);
- (Mixed) conifer woodland (WD3);
- Hedgerows (WL1);
- Treelines (WL2);
- Scrub (WS1);
- Immature woodland (WS2); and
- Ornamental/non-native shrub (WS3).

57 None of the recorded habitats on the Proposed Development site correspond with Annex I habitats as per the Interpretation manual of European Union Habitats (European Commission, 2013) and most are of low ecological value by virtue of floristics and management regime. The habitats are described in Chapter 7 of the EIAR.

4.4 Flora and Fauna Species

4.4.1 Rare and Protected Flora

58 A search of the NBDC database returned two records of a red-list species as occurring within 10km of the Proposed Development lands; Common Wintergreen *Pyrola minor*[14] and Slender Pocket-moss *Fissidens exilis*[15]. The habitat survey undertaken on 24 September 2024 and additional habitat verification survey on the 14 May 2025 did not find any protected or rare species. The verification survey was performed in May 2025 as the initial survey was performed late in September 2024, which was sub-optimal for classifying habitats and identifying flora species.

4.4.2 Invasive Flora

59 Records were returned for four non-native invasive plant species, listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and Habitats Regulations and the European Union (Invasive alien species) Regulations 2024 (S.I. 374/2024); Himalayan balsam *Impatiens glandulifera*, Japanese knotweed *Reynoutria japonica*, Spanish bluebell *Hyacinthoides hispanica,* and three-cornered garlic *Allium triquetrum*. These species were not recorded within the vicinity of the Proposed Development.

4.4.3 Otter

60 Otter and their breeding and resting places, are protected under the Wildlife Act 1976 (as amended). Otter are also listed on Annex II and Annex IV of the EU Habitats Directive and are afforded strict protection under the Habitats Directive and the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended). Otter have a widespread distribution in Ireland and typically otter territories are within the range of 7.5km for females and up to 21km for males[16].

61 The NBDC database holds records for the Annex II listed otter *Lutra lutra* within *c.* 10km of the Proposed Development, with the nearest record being from 1980, approximately 2.1km northwest of the Proposed Development site along the Seneschalstown stream.

62 The Knockharley Stream bounding the Proposed Development site is a poor-quality stream with little fisheries resource, and much of the stream is covered by riparian vegetation and is adjacent to planation forests, hedgerows, and agricultural land. These habitats could provide safe passage between the riverbank and the open areas for any potentially wide-foraging otters. However, the stream has previously been modified by removing bank vegetation and channelisation as part of an earlier stream diversion, and any suitable habitat has since been removed. No evidence of otter was recorded during surveys.

63 As such, the Proposed Development itself does not contain habitat (neither habitation nor feeding grounds) suitable to otter, and is therefore considered unsuitable for otter activity. This Annex II species is not considered further in this assessment, but is fully considered in EIAR Chapter 7 Biodiversity.

[14] Wyse Jackson, M., FitzPatrick, Ú., Cole, E., Jebb, M., McFerran, D., Sheehy Skeffington, M. & Wright, M. (2016) Ireland Red List No. 10: Vascular Plants. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Dublin, Ireland.

[15] Hodgetts, N.G. & Lockhart, N. (2025) Bryophytes (Mosses, Liverworts & Hornworts). Ireland Red List No. 14. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Dublin, Ireland.

[16] Ó'Neill, L., Veldhuizen, T., de Jongh, A. & Rochford, J. (2009). Ranging behaviour and socio-biology of Eurasian otters (*Lutra lutra*) on lowland mesotrophic river systems. European Journal of Wildlife Research. 55:363-370.

4.4.4 Bats

64 Bats, and their breeding and resting places, are protected under the Wildlife Acts and, as Annex IV species, are also afforded strict protection under Article 12 of the Habitats Directive. The lesser horseshoe bat *Rhinolophus hipposideros*, is also listed on Annex II of the Habitat Directive, necessitating the establishment of SACs for their protection. This species is not, however, known from the Proposed Development area. Its Irish distribution is confined to six western counties, occurring in clusters, with large areas that contain few or no colonies, which does not include Meath[17]. It was not recorded during surveys used to inform the preparation of the NIS. This Annex II bat species is not considered further in this assessment.

4.4.5 Birds

65 The NDBC desk study identified records of fifteen SCI bird species within *c*. 10km of the Proposed Development. Records for six species that are listed under Annex I of the Birds Directive were recorded within 10km of the Proposed Development.

4.4.5.1 Kingfisher

4.4.5.2 Kingfisher *Alcedo atthis* reside within the River Boyne corridor (Cummins *et al*., 2010), with several records of this species returned from the NBDC database within *c*. 10km of the Proposed Development. This Birds Directive Annex I species is associated with watercourses throughout Ireland, and nests in sandy banks over and in the vicinity of its river habitat. The closest European site for which Kingfisher is an SCI species is the River Boyne and River Blackwater SPA, located *c*. 4.2km north of the Proposed Development. Kingfisher are a sedentary species whose home range is limited to 2.5ha (0.25km^2)[18]. As such, any local populations of Kingfisher, which may be present within the vicinity of the Proposed Development, are not considered to form part of any SPA populations and there is no hydrological connectivity between the Proposed Developemtn and the SPA. While there was potentially suitable foraging habitat for Kingfisher within Knockharley Stream, no Kingfisher or their nests were identified during surveys between March and May 2025.Wintering Birds

66 A diverse range of both breeding and wintering bird species have been recorded during the surveys carried out in the preparation of this NIS. This includes bird species which are listed as SCIs for distal SPA sites.

67 The winter bird surveys undertaken for the Proposed Development between 2024 and 2025 recorded the following bird species which are listed as SCIs for SPA sites locally for their wintering populations: herring gull *Larus argentatus*, lesser black-backed gull *Larus fuscus*, and great black-backed gull *Larus marinus*.

68 Similarly, the breeding bird surveys undertaken in 2025 for the Proposed Development recorded the herring Gull *Larus argentatus* which is listed as a wintering SCI for SPA sites locally.

69 The full breeding and wintering bird survey results are provided in (Appendix II and Appendix III, respectively).

70 The conservation status of the bird species recorded during these various surveys considered:

- SCI species of SPAs within the ZoI of the Proposed Development

[17] NPWS & VWT (2022) Lesser Horseshoe Bat Species Action Plan 20222026. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

[18] Musseau *et al*., 2023. Sensitivity of the European Kingfisher (*Alcedo atthis*) to global change: evidence from home range features and contaminations by trace elements and organic pollutants, a case study in the marshes of Western Europe. 4th international Kingfisher conferencen, Biology, ecology & conservation, Wdecki Landscape Parc, Sep 2023, Tleń, Poland.

- Bird species listed on Annex I of the EU Birds Directive (2008/144/EC)

71 The only bird species recorded during breeding bird surveys undertaken for this Project between 2024 and 2025, which is listed as an SCI for SPA sites locally for their breeding and wintering populations, is shown with their international populations in Table 4 below. The peak counts observed during surveys between 2024 and 2025 are significantly less than the 1% of International populations shown in Table 4, demonstrating that none of these species were recorded in numbers which would align with international significance. There is no data available for gull species to determine National significance. No Birds Directive Annex I species were recording during Winter Bird or Breeding bird surveys.

Table 4: Wintering Bird Species Recorded during Wintering Bird Surveys in Comparison to the 1% of its International and National Populations

Common Name/ Scientific Name/ BTO Code	Peak Count in the Study Area (2024/2025)	Associated European Sites within the ZoI	1% of International Population[19]	1% of National Population
Herring Gull (HG) *Larus argentatus*	270	River Nanny Estuary and Shore SPA	7600	N/A (Data deficient)
Lesser Black-backed Gull (LB) *Larus fuscus*	30	North-west Irish Sea SPA	4900	N/A (Data deficient)
Great Black-backed Gull (GB) *Larus marinus*	13	North-west Irish Sea SPA	2700	N/A (Data deficient)

72 Appendix II and III provides a list of all wintering birds and breeding birds recorded during the surveys, respectively.

4.4.6 Aquatic Species

73 The desk study revealed no records of QI aquatic species within *c.* 10km of the Proposed Development.

74 Electro-fishing surveys and aquatic surveys were not undertaken as the Knockharley Stream which intersects the Proposed Development, does not have a sufficient volume of water. However, due to the hydrological connection between Knockharley Stream and the River Nanny *c.* 2.8km downstream, there is a possibility that surface runoff water during operation and construction could impact downstream fish species.

75 There is no suitable habitat (rivers or lakes) for fish and aquatic invertebrate species within the Proposed Development. European eel was reported in a previous EIAR (Celtic Waster, 2000), however the original copy of this report could not be located. Based on SSRS surveys described in Chapter 7 of the EIAR, Knockharley Stream around the site has poor habitat suitability for fish. As no records were available for fish or aquatic invertebrate species from the NBDC desk study, and there was no issue with the stream diversion from IFI, the aquatic species Atlantic salmon Salmo salar, river lamprey *Lampetra fluviatilis*, white-clawed Crayfish *Austropotamobius pallipes,* and freshwater pearl mussel *Margaritifera Margaritifera* were scoped out of the assessment.

There were no dedicated marine mammal surveys carried out as part of the assessment, and they were scoped out due to the Proposed Development being located on land, and that there are no proposed works within the North-West Irish Sea.

[19] Wetlands International (2025) "Waterbird Populations Portal". Retrieved from wpp.wetlands.org on Apr 29 2025.

4.5 Hydrology

76 The Proposed Development is located within the Nanny-Delvin Catchment. According to EPA data[20], the Knockharley Stream (IE_EA_08F050930) intersects the Proposed Development and eventually joins the River Nanny c. 2.8km downstream and ultimately discharges into the into the Irish Sea via the Nanny Estuary.

77 The EPA undertakes monitoring and reporting of the Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (Water Framework Directive or WFD) status of Irish waterbodies. Good ecological status (good status) is defined in Annex V of the WFD, in terms of quality of the biological community, the hydrological characteristics and the chemical characteristics of a waterbody[21]. The WFD classification scheme in Ireland includes five status classes: high, good, moderate, poor, and bad[22]. The WFD status of a waterbody reflects the biological, chemical and morphological conditions associated with it, and these elements together make up the ecological status of a waterbody.

78 The WFD status (2016-2021) of the Knockharley Stream within the Proposed Development site is "Poor".

79 In addition to monitoring WFD status, the EPA characterises whether waterbodies are at risk of failing to meet their environmental objectives. Flemingstown Steam is currently listed as being "under review".

4.6 Hydrogeology

80 The Proposed Development site lies within the Realtage Groundwater Body (GWB) (IE_EA_G_020). There are no European sites within this GWB which are designated for groundwater dependant habitats and/or species. The nearest SAC that is designated for groundwater dependant habitats is the River Boyne and River Blackwater SAC, which is located *c*. 4.8km to the north of the site and is in a different GWB (the Donroe Groundwater Body, IE_EA_G_021).

81 The Realtage GWB has good WFD groundwater status (2016-2021) the groundwater risk is currently "Not at Risk".

82 The GSI (2017) Interim Vulnerability Map presently classifies the Groundwater vulnerability of the Project study area as Low (Category L), and Subsoil Permeability is "Low".

4.7 Air Quality

83 The EPA produces an annual report on air quality[23], which includes results from air quality monitoring stations across various Air Quality Zones within Ireland. The EPA has divided the country into zones for the assessment and management of air quality. The zones adopted in Ireland are Zone A, the Dublin conurbation; Zone B, the Cork conurbation; Zone C, comprising 21 large towns in Ireland with a population >15,000; and Zone D, the remaining area of Ireland. The background air quality in the area of the Development is of good quality and the site is located in 'Zone D' as denoted by the EPA.

84 In terms of potential air quality impact assessment, the Proposed Development has the potential to give rise to construction dust impact during the construction stage and during the operation of the development, there is the potential for air quality impact due to associated road traffic movements.

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[20] Environmental Protection Agency (2020) Data available for download at http://gis.epa.ie/GetData/Download

[21] Introduction to the EU Water Framework Directive - Environment - European Commission (europa.eu) [Accessed 20/04/2025].

[22] Information on WFD classification categories and characterisation from the EPA website www.epa.ie/water/watmg/wfd/ [Accessed 20/04/2025].

[23] Air Quality in Ireland 2021 (2022)

85 The effects of air pollution derived from anthropogenic activities is known to have negative impacts on the environment, either directly by causing vegetation die-back, or indirectly by affecting the acidity and nutrient status of soils and waters[24]. Governments have set limit values for a range of air pollutants in ambient air, known as Air Quality Standards (AQS). The Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011) transpose EU Directive 2008/50/EC into Irish law.

86 There are no European sites within 250m of construction works (IAQM, 2024)[25], therefore there is no air quality impact on European sites.

5 Screening for Appropriate Assessment: Potential Impacts, Zone of Influence and Identifying European Sites at Risk of Effects

87 Based on the baseline and receiving ecological environment and the nature and characteristics of the Proposed Development the following potential impacts were identified in the Appropriate Assessment (Scott Cawley Ltd. (2025a)):

- Habitat loss and fragmentation;
- Habitat degradation as a result of hydrological impacts;
- Habitat degradation as a result of hydrogeological impacts;
- Habitat degradation as a result of introducing/spreading non-native invasive species;
- Habitat degradation as a result of air quality impacts;
- Disturbance and displacement impacts; and
- Collision Risk.

5.1 Zone of Influence of the Proposed Development

88 The Zone of Influence (ZoI) is the area within which the Proposed Development could affect the receiving environment such that it could potentially have significant effects on the QI habitats or QI/SCI species of a European site.

89 The mechanism to define the ZoI is summarised as follows:

- Consider the nature, size and location of the Proposed Development (see Section 4 for a description of the Project);
- Consider the sensitivities of the relevant ecological receptors (see Section 5.3 for a description of the baseline environment);
- Identify potential impact sources and pathways (see Section 6 for the potential impacts associated with the Project); and
- Determine the ZoI based on the potential extent of the impact.

90 In consideration of the European sites considered in this NIS (Section **Error! Reference source not found.**), identified impact sources and pathways (Section **Error! Reference source not found.**), the ZoI of each impact pathway is explained and summarised in Table 5 (Section 6.8).

[24] Aherne, J. (2021) *Nitrogen–sulfur critical loads: Assessment of the impacts of air pollution on habitats.* Available at: https://www.epa.ie/publications/research/air/Research_Report_390.pdf (Accessed: May, 2025).

[25] IAQM (2024). *Guidance on the Assessment of Dust from Demolition and Construction*

5.2 Habitat loss and fragmentation

91 The Proposed Development does not lie within or overlap with the boundary of any European site. Therefore, there are no European sites at risk of direct habitat loss impacts. As the Proposed Development does not traverse any European sites there is no potential for habitat fragmentation to occur.

92 The potential for the loss of *ex-situ*[26] inland feeding sites utilised by SCI bird species[27] as a consequence of the Proposed Development to impact on the conservation objectives of any SPA has been assessed. Potential impacts may arise due to the direct loss of *ex-situ* inland sites that individual SCI bird species of local SPA populations rely upon as feeding and/or roosting habitat where these sites fall within the Proposed Development boundary.

93 The wintering bird surveys undertaken between September 2024 to March 2025 noted that the void areas were being utilised by large flocks of herring gull, and to a minor extent lesser black-backed gull and great black backed gull. The Proposed Development is within the core foraging range of herring Gull, which is an SCI of the River Nanny Shore and Estuary SPA and North-West Irish Sea SPA, as well as lesser black-backed gull and great black-backed gull[28], which are SCIs of North-West Irish Sea SPA. While it cannot be ruled out that the recorded SCI species may belong to an SPA population, none of the SCI species potentially utilising *ex-situ* foraging grounds within the Proposed Development were recorded in numbers which would align with international significance, therefore there is no there is no possibility of the Proposed Development resulting in population level effects on SCI species.

94 All other European sites are not considered to be within the ZoI of the Proposed Development, and therefore are not at risk of any habitat loss and fragmentation as a result of the Proposed Development.

5.3 Habitat degradation as a result of hydrological impacts

95 The release of contaminated surface water runoff and/or an accidental spillage or pollution event into any surface water features during the construction or operation stage of the Proposed Development, has the potential to affect water quality in the receiving aquatic environment. Due to the close proximity of surface water features to the Proposed Development, in the absence of mitigation, the associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the discharge point or location of the accidental pollution event. Such an occurrence, of a sufficient magnitude, either alone or in combination with other pressures on water quality, and in the absence of mitigation could undermine the conservation objectives of Nanny Estuary and Shore SPA and North-West Irish Sea SPA.

96 This reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within these European sites, which in turn would negatively affect the SCI bird species that rely upon these habitats as foraging and/or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. In addition,

[26] These areas termed '*ex-situ*' sites are defined as areas of habitat situated within the immediate hinterland of the SPA, or in areas ecologically connected to it, which support SCI bird species. There is no information or evidence to confirm whether any of the bird species recorded in habitats outside of European sites, which are within the ZoI of the Project, are birds from either River Nanny Estuary and Shore SPA or the North-west Irish Sea SPA, or are not part of the population from either European site. Therefore, a precautionary approach is being taken in assuming that any habitat areas supporting SCI bird species are potentially '*ex-situ*' sites under that definition, and are assessed accordingly.

[27] The listed gull species may at times use habitats situated within the immediate hinterland of the SPA or in areas ecologically connected to it [i.e., *ex-situ* sites]. The reliance on these habitats will vary from species to species and from site to site. Significant habitat change or increased levels of disturbance within these areas could result in the displacement of one or more of the listed waterbird species from areas within the SPA, and/or a reduction in their numbers"

[28] Woodward, I., Thaxter, C.B., Owen, E. & Cook, A.S.C.P. (2019) Desk-based revision of seabird foraging ranges used for HRA screening. *BTO Research Report No. 724*.

impacts on water quality, if of a sufficient magnitude and duration, could negatively affect the SCI populations for which SPAs are designated by affecting their foraging resources.

97 As the Proposed Development has the potential to result in habitat degradation and effects on the QIs/SCIs of European sites (i.e., River Nanny Estuary and Shore SPA and North-west Irish Sea SPA) as the result of hydrological impacts, there is the potential for in combination effects to occur. All other European sites are not considered to be within the ZoI of the Proposed Development, and therefore are not at risk of any hydrological impacts as a result of the Proposed Development.

5.4 Habitat degradation as a result of hydrogeological impacts

98 The Proposed Development lies within the Realtage GWB (IE_EA_G_020). The area lies on the topographic boundary between the Boyne and Nanny River catchments. The flow is generally in localised systems with little continuity between them. Local groundwater flow directions will be dictated by local topographic, and hence hydraulic, gradients, which will converge at rivers[29].

99 During groundworks and excavations, the groundwater vulnerability will be increased and there will be a more direct pathway for surface contaminants to enter the underlying bedrock aquifer and migrate towards downgradient receiving Knockharley Stream and River Nanny surface watercourses.

100 In an unmitigated scenario, there is a potential risk associated with the discharge of contaminants to the ground affecting both the underlying aquifer and downstream waterbodies including the Knockharley Stream and associated downstream European sites. There are no groundwater-dependent habitats within the vicinity of the Proposed Development.

101 The Realtage GWB beneath the Proposed Development site is considered to have low levels of interconnection between groundwater and surface water[29] with limited potential for dissolved phase contaminants to migrate towards receiving watercourses and European sites. As the GWB underlying the Proposed Development site is considered to have low levels of interconnection between groundwater and surface water, there is no potential for water quality impacts to affect SCI species of any European site. The only European site in the same GWB is River Boyne and River Blackwater SPA, and as this is upstream of the Proposed Development it cannot influence groundwater conditions in this European site.

102 Therefore, there is no possibility of the Proposed Development undermining the conservation objectives of the QIs or SCIs of any European site, either alone or in combination with any other plans or projects, as a result of hydrogeological effects.

5.5 Habitat degradation as a result of introducing/spreading non-native invasive species

103 No species currently listed on the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 and Habitats Regulations and the European Union (Invasive alien species) Regulations 2024 (S.I. 374/2024) were recorded within the Proposed Development site during the 2024 and 2025 surveys. There is the possibility that invasive species may be bought to the site during construction or brought in landfill waste during operation.

104 In an unmitigated scenario, there is a potential that invasive species could colonise downstream terrestrial areas of European sites via Knockharley Stream which could be a potential vector for the spread of these species. Any impacts to habitats by these invasive species could affect QI/SCI species that may utilise the River Nanny, including those from River Nanny Estuary and Shore SPA.

105 As the Proposed Development has the potential to result in habitat degradation and effects on of the QIs/SCIs of River Nanny Estuary and Shore SPA, as the result of the spread of invasive species, there is the potential for in combination effects to occur. All other European sites are not considered to be within the

[29] https://gsi.geodata.gov.ie/downloads/Groundwater/Reports/GWB/RealtageGWB.pdf

ZoI of the Proposed Development, and therefore are not at risk of the spread of invasive species as a result of the Proposed Development.

5.6 Disturbance and displacement impacts

106 A temporary increase in noise, vibration, lighting and/or human activity levels during the construction or operation of the Proposed Development could result in the disturbance to and/or displacement of fauna species present within the vicinity of the Proposed Development.

107 Construction-related disturbance and displacement of fauna species could potentially occur within the vicinity of the Proposed Development. For mammal species such as badger and otter, disturbance effects would not be expected to extend beyond 150m[30]. For birds, disturbance effects would not be expected to extend beyond a distance of *c*. 300m, as noise levels associated with general construction activities would attenuate to close to background levels at that distance[31]. There are no European sites within the ZoI of the Proposed Development in relation to disturbance to fauna species.

108 There are two SPAs located distally to the Proposed Development which are designated for SCI species, a number of which are known to forage at inland *ex-situ* sites, namely River Nanny Estuary and Shore SPA and North-west Irish Sea SPA. These species include herring gull, lsser black-backed gull, and great black-backed gull. Suitable inland foraging sites, which these bird species utilise, are located within the potential ZoI of the Proposed Development. In terms of construction noise, levels below 50dB would not be expected to result in any response from foraging or roosting birds. Noise levels between 50dB and 70dB would provoke a moderate effect/level of response from birds, i.e., birds becoming alert and some behavioural changes (e.g., reduced feeding activity), but birds would be expected to habituate to noise levels within this range. Noise levels above 70dB would likely result in birds moving out of the affected zone or leaving the site altogether. At *c.* 300m, typical noise levels associated with construction activity (BS 5228) are generally below 60dB or, in most cases, are approaching the 50dB threshold. There is potential for temporary displacement in the vicinity of the Proposed Development due to noise and vibration associated with construction works during the construction phase of the development.

109 While it cannot be ruled out that the SCI species recorded from the Surveys of the Proposed Development may belong to an SPA population, none of the SCI species potentially utilising *ex-situ* foraging grounds within the Proposed Development site were recorded in numbers which would align with international significance, therefore there is no possibility of the Proposed Development resulting in population level effects on SCI species. Additionally, while there will be some habitat loss, in terms of potential *ex-situ* foraging areas, for wintering bird species within the Proposed Development, new areas will be created as a new void is created for dumping waste and any disturbance impact is considered to be a temporary effect during Construction Phase. Therefore, there is no possibility of the Proposed Development undermining the conservation objectives of the QIs or SCIs of any European site, either alone or in combination with any other plans or projects, as a result of noise impacts.

[30] This is consistent with Transport Infrastructure Ireland (NRA) guidance (*Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes* and *Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes*) documents. This is a precautionary distance, and likely to be moderated by the screening effect provided by surrounding vegetation and buildings, with the actual ZoI of construction related disturbance likely to be much less in reality.

[31] The disturbance zone of influence for waterbirds is based on the relationship between the noise levels generated by general construction traffic/works (BS 5228:2009 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Part 1 Noise) and the proximity of those noise levels to birds – as assessed in Cutts, N. Phelps, A. & Burdon, D. (2009) *Construction and Waterfowl: Defining Sensitivity, Response, Impacts and Guidance*, and Wright, M., Goodman, P & Cameron, T. (2010) *Exploring Behavioural Responses of Shorebirds to Impulsive Noise*. Wildfowl (2010) 60: 150–167. At 300m, noise levels are below 60dB or, in most cases, are approaching the 50dB threshold below which no disturbance or displacement effects would arise.

5.7 Habitat degradation as a result of air quality impacts

110 A reduction in air quality within the immediate vicinity of the construction and operation works may occur as a consequence of dust deposition associated with construction/operational activities. This includes reduction in photosynthesis due to smothering from dust on the plants and chemical changes such as acidity to soils. Whilst potential impacts on vegetation and habitats arising from dust associated with a project of this nature is generally greatest within *c.* 50-100m.

111 There are no European sites within 200m of the Proposed Development. As such, there is no possibility of the Proposed Development undermining the conservation objectives of the QIs or SCIs of any European site as a result of air quality impacts.

5.8 Collision Risk

112 The presence of new pylons and the IBA facility within the Proposed Development could potentially result in direct mortality of breeding bird species that utilise the site for foraging and/or commuting, due to collisions. While the IBA facility (a consented project under ABP 303211-18[32]) is not part of the Proposed Development, this building will be located within the site and the assessment will take this into account when assessing impacts.

113 From a review of available literature on the subject, bird collisions with man-made structures are common and well documented (Banks, R.C., 1979, Jenkins, *et al.*, 2010, Klem, D., 1990, Erickson, *et al.*, 2005, Erickson, *et al.*, 2001) with migratory passerine species the most prevalent collision victims (Bing *et al.*, 2012, Longcore *et al.*, 2013). Bird collision with buildings is generally associated with reflective material such as windows or large surfaces of glass which create a mirror and appear to show the continuation of the sky or surrounding landscape, an effect that can be exacerbated by lighting (Sheppard, C. & Phillips, G., 2015). Whilst the design of the facades of the buildings do include windows, no large surfaces of glass are proposed.

114 Bird collisions and electrocution with power pylons is documented (Demerdzhiev, 2014) and (Janss, 2000) with 'poor fliers' and raptor species being the most prevalent victims. Line marking of power lines has been demonstrated to reduce bird mortality[33].

115 In the absence of mitigation there could be a low level of mortality attributable to bird collision with glazing on the proposed buildings and power pylons, however this impact will not cause any significant effect at a local scale or any other geographic scale.

5.9 Summary

116 The potential impacts presented above is a summary of the Screening Assessment conclusions.

117 Given the lack of any linkage between the Proposed Development and the QIs of River Boyne and River Blackwater SAC, Boyne Coast and Estuary SAC, River Boyne and River Blackwater SPA, and Boyne Estuary SPA, these European sites have been ruled out as there is no impact pathway to undermine the conservation objectives of the Qualifying Interests or Special Conservation Interests of these European sites.

118 The potential impacts associated with the Proposed Development have the potential to affect the receiving environment and, as a result, the conservation objectives supporting the Special Conservation Interests of River Nanny Estuary and Shore SPA and the North-west Irish Sea SPA.

[32] https://www.pleanala.ie/en-ie/case/303211

[33] Guidance - Assessment and mitigation of impacts of power lines and guyed meteorological masts on birds (Scottish Natural Heritage, 2025). Available from https://www.nature.scot/doc/guidance-assessment-and-mitigation-impacts-power-lines-and-guyed-meteorological-masts-birds#acknowledgements

119 The potential impacts of the Proposed Development on the receiving environment, their zone of influence, and the European sites at risk of likely significant effects are summarised in Table 5 below.

Table 5: Summary of the potential impacts of the Proposed Development on the receiving environment, their potential zone of influence, and the European sites within the zone of influence

Potential Direct or Indirect Impacts and zone of influence of the Potential Effects	Are there any European sites within the zone of influence?
Habitat loss and fragmentation Habitat loss will be confined to the lands within the Proposed Development boundary. There is no potential for loss of *ex-situ* inland feeding sites used by SCI wintering bird species (for the duration of the construction works).	No There are no European sites at risk of habitat loss or fragmentation.
Habitat degradation as a result of hydrological impacts Habitats and species downstream of the Proposed Development site and the associated surface water drainage discharge points.	Yes River Nanny Estuary and Shore SPA and the North-west Irish Sea SPA is potentially at risk of hydrological effects arising from surface water run-off and pollution associated with the construction and/or operational phases of the Proposed Development.
Habitat degradation as a result of hydrogeological impacts Groundwater-dependant habitats, and the species those habitats support, in the local area that lie downgradient of the Proposed Development site.	No There are no European sites at risk of hydrogeological effects associated with the Proposed Development.
Habitat degradation as a result of introducing/spreading non-native invasive species Habitat areas within, adjacent to, and potentially downstream of the Proposed Development site.	Yes River Nanny Estuary and Shore SPA is potentially at risk from the spread of non-native invasive species bought into to the Proposed Development during the construction and/or operational phases of the Proposed Development.
Disturbance and displacement impacts Potentially up to several hundred metres from the Proposed Development boundary, dependent upon the predicted levels of noise, vibration and visual disturbance associated with the Proposed Development, taking into account the sensitivity of the qualifying interest species to disturbance effects	No There are no European sites within the potential zone of influence of disturbance effects associated with the construction or operation of the proposed Project.
Habitat degradation as a result of air quality impacts Potentially up to 50m from the proposed Project boundary and 250m from the Construction Compound at Construction Phase, and up to 200m at Operational Phase.	No There are no European sites at risk of air quality impacts associated with the Proposed Development.
Collision Risk for bird species that utilise the site for commuting due to the new pylons and IBA facility.	No No possibility of the Proposed Development undermining the conservation objectives of the QIs or

	SCIs of any European sites as a result of mortality from building collisions.

6 Assessment of Effects on European Sites

120 This section of the NIS assesses the direct and indirect impacts of the Proposed Development on the European sites which fall within its zone of influence. For each of these European sites, the assessment below sets out the relevant ecological baseline information, the analysis of the potential impacts, the Qualifying Interests/Special Conservation Interests at risk of these potential impacts, in view of the sites' conservation objectives, and the mitigation measures (if required) to avoid/reduce the effects of any potential impacts.

121 The assessment of the Proposed Development in combination with any other plans or projects on European sites is presented in Section 8.

6.1 River Nanny Estuary and Shore SPA [004158]

6.1.1 Ecological Baseline Description for River Nanny Estuary and Shore SPA

122 The Natura 2000 Standard Data Form lists[34] the site as being an important site for wintering waders, with nationally important populations of golden plover, oystercatcher, ringed plover, knot and sanderling. The populations of knot and sanderling are of particular note as they represent approximately 4% of their respective national totals. Herring Gull also occurs here in nationally important numbers. The site is of most importance as a roost area for the birds but the intertidal flats also provide feeding habitat. There is also regularly occurring species listed on Annex I of the EU Birds Directive.

6.1.2 Special Conservation Interests and Conservation Objectives of River Nanny Estuary and Shore SPA

The SCIs of River Nanny Estuary and Shore SPA and its overall conservation objective are listed in

Table ***6***.

Table 6: Special Conservation Interests and Conservation Objectives of River Nanny Estuary and Shore SPA

[34] NPWS (2020) Natura Standard Data Form (River Nanny Estuary and Shore SPA 004158). [Online] Available from https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004158.pdf

Special Conservation Interest(s)	Conservation Objective(s)
River Nanny Estuary and Shore SPA [004158] A130 Oystercatcher *Haematopus ostralegus* A137 Ringed Plover *Charadrius hiaticula* A140 Golden Plover *Pluvialis apricaria* A143 Knot *Calidris canutus* A144 Sanderling *Calidris alba* A184 Herring Gull *Larus argentatus* A999 Wetlands *S.I. No. 140/2012 - European Communities (Conservation of Wild Birds (River Nanny Estuary and Shore SPA 004158)) Regulations 2012.* *NPWS (2012) Conservation Objectives: River Nanny Estuary and Shore SPA 004158. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.*	To maintain the favourable conservation condition of the bird species listed as SCIs for this SPA.

123 In conjunction with considering the generic conservation objective for this SPA "*To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA*" and "*To maintain the favourable conservation condition of the wetland habitat in the SPA*". The site specific conservation objectives document for River Nanny Estuary and Shore SPA also informed this assessment.

124 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Qualifying Interests/Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests of for River Nanny Estuary and Shore SPA are presented in Table 7.

6.1.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

125 The direct and/or indirect impacts by which the Proposed Development could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the Qualifying Interests of River Nanny Estuary and Shore SPA are:

- Habitat degradation as a result of hydrological impacts;
- Habitat degradation as a result of introducing/spreading non-native invasive species.

6.1.3.1 Habitat degradation as a result of hydrological impacts

126 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge.

127 The River Nanny Estuary and Shore SPA occurs downstream of the Proposed Development, within the same water catchment area. Water quality impacts have the potential to indirectly affect the conservation objectives of the SCI bird species, and directly impact the Conservation objectives of the supporting Wetlands habitat through habitat degradation as a result of water quality degradation. Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within this European site, which in turn would negatively affect the SCI bird species that utilise these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of River Nanny Estuary and Shore SPA.

6.1.3.2 Habitat degradation as a result of introducing/spreading non-native invasive species

128 No non-native invasive plant species, listed on the Third Schedule of the EU (Birds and Natural Habitats) Regulations 2011 (as amended) were present within the Proposed Development. Records of invasive species in the vicinity of the Proposed Development were returned from the desk study. Due to the nature of the site, there is the potential for non-native invasive plant species to be introduced in waste bought to the landfill.

129 Therefore, in the absence of mitigation there is potential for invasive species to spread or be introduced during construction to terrestrial habitat areas in River Nanny Estuary and Shore SPA downstream of the Proposed Development. These in turn may result in the degradation of the existing wetland habitats and therefore undermine the conservation objectives of this European site. As the Proposed Development has the potential to result in habitat degradation of the QIs of a European site as the result of the spread of invasive species, there is the potential for in combination effects to occur in association with other activities/plans/projects.

6.1.3.3 Summary

130 Table 7 presents a summary of the potential impacts of the Proposed Development on the Qualifying Interests of River Nanny Estuary and Shore SPA, and the potential impacts to the site's conservation objectives in the absence of mitigation measures.

Table 7: Potential Impacts/Effects on the Conservation Objectives of River Nanny Estuary and Shore SPA

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
River Nanny Estuary and Shore SPA			
A130 Oystercatcher *Haematopus ostralegus,* A137 Ringed Plover *Charadrius hiaticula,* A140 Golden Plover *Pluvialis apricaria,* A143 Knot *Calidris canutus,* A144 Sanderling *Calidris alba,* A184 Herring Gull *Larus argentatus.* To maintain the favourable conservation condition of Oystercatcher, Ringed plover, Golden plover, Knot, Sanderling, and Herring gull in River Nanny Estuary and Shore SPA, which is defined by the following list of attributes and targets:			
Population trend / Percentage change / Long term population trend stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water inputting to the Knockharley Stream and downstream in the River Nanny. An accidental pollution event of a sufficient magnitude, either alone or in combination with other pollution sources, could affect the quality of the habitats and the fauna communities they support.	Yes The mitigation measures described in Section 6.1.4.1 to protect water quality in the receiving environment will ensure that surface and ground water quality inputting to the Knockharley Stream is protected during construction and operation of the Proposed Development.	No
Distribution / Range, timing and intensity of use of areas / There should be no significant decrease in the range, timing or intensity of use of areas by oystercatcher other than that occurring from natural patterns of variation			
A999 Wetlands To maintain the favourable conservation condition of the wetland habitat in River Nanny Estuary and Shore SPA as a resource for the regularly-occurring migratory waterbirds that utilise it. This is defined by the following attribute and target:			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Wetland habitat / Area (ha) / The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 230ha, other than that occurring from natural patterns of variation	Yes An accidental pollution event during construction or operation could affect surface water inputting to the Knockharley Stream and downstream in the River Nanny. An accidental pollution event of a sufficient magnitude, either alone or in combination with other pollution sources, could affect the quality of the habitats and the fauna communities they support. The introduction and/or spread of invasive species to downstream European sites could potentially result in the degradation of existing habitats present, in particular estuarine habitats not permanently or regularly inundated by seawater. These species may outcompete other native species.	Yes The mitigation measures described in Section 6.1.4.1 to protect water quality in the receiving environment will ensure that surface and ground water quality inputting to the Knockharley Stream is protected during construction and operation of the Proposed Development. The mitigation measures described in Section 6.1.4.2, the CEMP, and the ISMP will prevent the introduction and/or spread of invasive species to downstream European sites during construction and operation of the Proposed Development.	No

6.1.4 Mitigation Measures

131 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Development on River Nanny Estuary and Shore SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

6.1.4.1 Measures to Protect Surface Water Quality during Construction

132 During the Construction Phase, all works will be undertaken in accordance with the Construction Environmental Management Plan (CEMP) which outlines appropriate mitigation measures for the Construction Phase (See Appendix X). Following appointment, the contractor will be required to further develop the CEMP to provide detailed construction phasing and methods to manage and prevent any potential emissions to ground and surface water with regard to the relevant industry standards (e.g., Guidance for Consultants and Contractors, CIRIA-C532', CIRIA, 2001). The measures and action prescribed in the CEMP will be fully implemented for the duration of the Construction Phase, covering construction and waste management activities, and protection of biodiversity that will take place during the Construction Phase of the Proposed Development. Mitigation works will be adopted as part of the construction works for the Proposed Development. These measures will address the main activities of potential impact which include:

- Control and Management of surface water runoff;
- Control and management of shallow groundwater during excavation and dewatering;
- Management and control of soil and materials;
- Appropriate fuel and chemical handling, transport and storage; and,
- Management of accidental release of contaminants at the site.

133 Surface water runoff management will be required to prevent runoff entering excavations during construction. Surface water will require diversion around the open excavations using standard temporary drainage methods to ensure that surface water is effectively conveyed around works areas.

134 The dewatering methodology to be implemented by the appointed Contractor will ensure that any dewatering is confined to the localised zone and does not extend towards the site boundaries.

135 There will be no authorised discharge of water to ground during the construction phase. Where water must be pumped from the excavations, water will be discharged by the contractor, following appropriate treatment (e.g., settlement or hydrocarbon interceptor) to sewer in accordance with the necessary discharge licences issued by UÉ under Section 16 of the Local Government (Water Pollution) Acts and Regulations for any water discharges to sewer or from FCC under Section 4 of the Local Government (Water Pollution) Act 1977, as amended for discharges to surface water. Under no circumstances will any untreated wastewater generated onsite (from equipment washing, road sweeping etc.) be released offsite. Where required, all public sewers will be protected to ensure that any untreated wastewater generated onsite does not enter the public sewers.

136 Where required, standard design and construction measures (i.e., groundwater drainage around impermeable subsurface structures) will ensure that groundwater flow across the site is maintained and that there will be no impact on groundwater levels.

137 During the construction phase, fuelling and lubrication of equipment will be carried out in accordance with the procedures outlined in the CEMP in a designated area of the Proposed Development site away from any watercourses and drains (where not possible to carry out such activities onsite). Any diesel, fuel or hydraulic oils stored onsite will be stored in designated areas. These areas will be bunded and located away from surface water drainage and features. Bunds will have regard to Environmental Protection Agency guidelines '*Amendment to IPC Guidance Note on Storage and Transfer of Materials for Scheduled Activities*'

(EPA, 2013). The main contractor will maintain an emergency response action plan and emergency procedures will be developed by the appointed contractor in advance of any works commencing.

138 Strict supervision of contractors will be adhered to in order to ensure that all plant and equipment utilised on-site is in good working condition. Any equipment not meeting the required standard will not be permitted for use within the Proposed Development site. Only emergency breakdown maintenance will be carried out on-site. Drip trays and spill kits will be available on-site to ensure that any spills from vehicles are contained and removed off-site. There may also be the requirement for use of portable generators or similar fuel containing equipment during the construction phase of the Proposed Development, which will be placed on suitable drip trays. Regular monitoring of drip tray content will be undertaken to ensure sufficient capacity is maintained at all times.

139 Emergency procedures will be developed by the appointed Contractor in advance of works commencing and spillage kits will be available on-site including in vehicles operating on-site. Construction staff will be familiar with emergency procedures in the event of accidental fuel spillages. Remedial action will be immediately implemented to address any potential impacts in accordance with industry standards and legislative requirements. The emergency procedures shall be cognisant of the following:

- Any required emergency vehicle or equipment maintenance work will take place in a designated impermeable area within the site.
- Emergency response procedures will be put in place, in the unlikely event of spillages of fuels or lubricants.
- Spill kits including oil absorbent material will be provided so that any spillage of fuels, lubricants or hydraulic oils will be immediately contained.
- In the event of a leak or spill from equipment in the instance of a mechanical breakdown during operation, any contaminated soil will be removed from the Proposed Development site and compliantly disposed of off-site. Residual soil will be tested to validate that all potentially contaminated material has been removed. This procedure will be undertaken in accordance with industry best practice procedures and standards.
- All construction works staff will be familiar with emergency procedures in the event of accidental fuel spillages.
- All construction works staff on-site will be fully trained on the use of equipment.

140 Pumping of concrete will be monitored to ensure that there is no accidental discharge. All work will be carried out in the dry and effectively isolated from any onsite drains. A suitable risk assessment for wet concreting will be completed prior to works being carried out. There will be no mixer washings or excess concrete discharged onsite. All excess concrete is to be removed from site and all washout of concrete chutes to be captured in a tank which shall be removed offsite for disposal at an authorised waste facility.

141 Welfare facilities have the potential, if not managed appropriately, to release organic and other contaminants to ground or surface water courses. Foul drainage from temporary welfare facilities during the construction phase of the Proposed Development will either be discharged to temporary holding tank(s), the contents of which will periodically be tankered offsite to a licensed facility.

6.1.4.2 Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European sites During Construction

Confirmatory Pre-Construction Survey

142 The appointed contractor will ensure that a confirmatory pre-construction non-native invasive species survey will be undertaken by a suitably qualified specialist to confirm the absence and / or extent of all Third Schedule non-native invasive species within the footprint of the proposed Project. Where an infestation is reconfirmed / identified within the footprint of the proposed Project, this will require the implementation of the Invasive Species Management Plan (refer to the CEMP in Appendix X of this NIS).

Non-Native Invasive Species Management Plan (ISMP)

143 Where a pre-construction non-native invasive species re-survey has confirmed the presence of previously identified Third Schedule non-native invasive species, or identifies newly established non-native invasive species within the footprint of the proposed Project, the ISMP produced will provide a detailed description of the infestations (e.g., approximate area of the respective colonies (m^2), where feasible; approximate total number of stems, pattern of growth and information on other vegetation present), and where necessary, include calculations of volumes of infested soils to be excavated.

144 The ISMP for the proposed Project will be implemented, including the assessment presented in the proposed Project non-native ISMP detailing the control measures, as advised by a suitably qualified specialist, in accordance with Transport Infrastructure Ireland's The Management of Invasive Alien Plant Species on National Roads – Technical Guidance[35] and The Management of Invasive Alien Plant Species on National Roads – Standard[36], and other species-specific guidance documents including those listed in the non-native ISMP, as necessary.

145 The appointed contractor will ensure that all control measures specified in the proposed Project non-native ISMP shall be implemented by a suitably qualified and licensed specialist prior to the construction of the proposed Project to control the spread of newly established non-native invasive species within the footprint of the proposed Project. Furthermore, the appointed contractor will adhere to control measures specified within the Non-Native ISMP throughout the Construction Phase of the proposed Project.

146 The site will be monitored after control measures have been implemented and monitoring will take place again in the subsequent years following treatment. Any re-growth will be subsequently treated as detailed in the proposed Project non-native ISMP. The ISMP is contained as an Appendix to the CEMP (Appendix X to this NIS).

Measures to Prevent the Spread of Non-Native Invasive Species to Downstream European sites During Operation

147 Once the Proposed Development is in operation (and the specialist contractor has certified in writing the eradication of all non-native species that have been treated), the longer term monitoring management as prescribed in the ISMP. No additional mitigation is required.

6.1.5 *Residual Impacts*

148 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Development poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the Special Conservation Interests of River Nanny Estuary and Shore SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Development that could adversely affect the integrity of River Nanny Estuary and Shore SPA.

6.1.6 *Conclusion of Assessment for River Nanny Estuary and Shore SPA*

149 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of River Nanny Estuary and Shore SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the Special Conservation Interests, it has been concluded that the Proposed Development does not pose a risk of adversely affecting (either directly or indirectly) the integrity of River Nanny Estuary and Shore SPA.

[35] Transport Infrastructure Ireland. (2020a). The Management of Invasive Alien Plant Species on National Roads – Technical Guidance

[36] Transport Infrastructure Ireland. (2020b). The Management of Invasive Alien Plant Species on National Roads – Standard

6.2 North-west Irish Sea SPA [004236]

6.2.1 Ecological Baseline Description for North-west Irish Sea SPA

150 The site synopsis[37] lists the site as being an important resource for marine birds, and is considered Internationally Important for several waterbird species. This includes populations of internationally important numbers of Manx shearwater, great northern diver, and common scoter. 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. There is also regularly occurring species listed on Annex I of the EU Birds Directive, i.e. red-throated diver, great northern diver, roseate tern, common tern, arctic tern, little tern, and little gull.

6.2.2 Special Conservation Interests and Conservation Objectives of North-west Irish Sea SPA

151 The Special Conservation Interests of North-west Irish Sea SPA and the overall conservation objectives, are listed below in Table 8.

Table 8: Special Conservation Interests and Conservation Objectives of North-west Irish Sea SPA

Special Conservation Interest(s)	Conservation Objective(s)
A001 Red-throated Diver *Gavia stellata* A003 Great Northern Diver *Gavia immer* A009 Fulmar *Fulmarus glacialis* A013 Manx Shearwater *Puffinus puffinus* A017 Cormorant *Phalacrocorax carbo* A018 Shag *Phalacrocorax aristotelis* A065 Common Scoter *Melanitta nigra* A179 Black-headed Gull *Chroicocephalus ridibundus* A182 Common Gull *Larus canus* A183 Lesser Black-backed Gull *Larus fuscus* A184 Herring Gull *Larus argentatus* A187 Great Black-backed Gull *Larus marinus* A188 Kittiwake *Rissa tridactyla* A192 Roseate Tern *Sterna dougallii* A193 Common Tern *Sterna hirundo* A194 Arctic Tern *Sterna paradisaea* A195 Little Tern *Sterna albifrons* A199 Guillemot *Uria aalge* A200 Razorbill *Alca torda* A204 Puffin *Fratercula arctica* A862 Little Gull *Hydrocoloeus minutus* *No SI Documents* NPWS (2023b) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.

[37] NPWS (2023a) *North-west Irish Sea SPA [004236] Site Synopsis*

152 In conjunction with considering the generic conservation objective for this SPA "*To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA*", the site specific conservation objectives document for North-west Irish Sea SPA also informed this assessment.

153 The site specific conservation objectives document sets out the attributes, measures and targets that define the favourable conservation condition of the Special Conservation Interests within the European site. Affecting the conservation condition of the Qualifying Interests/Special Conservation Interests is deemed to constitute an adverse effect on the integrity of a European site. The specific attributes and targets used to define the conservation objectives of the Special Conservation Interests for North-west Irish Sea SPA are presented in Table 9.

6.2.3 *Examination and Analysis of Potential Direct and Indirect Impacts*

154 The direct and/or indirect impacts by which the Proposed Development could (in the absence of mitigation measures) potentially affect the conservation objective attributes and targets supporting the conservation condition of the SCIs of North-west Irish Sea SPA are:

- Habitat degradation as a result of hydrological impacts.

6.2.3.1 Habitat degradation as a result of hydrological impacts.

155 The release of contaminated surface water runoff and / or an accidental spillage or pollution event into any surface water features during construction, or operation, has the potential to affect water quality in the receiving aquatic environment. Such a pollution event may include: the release of sediment into receiving waters and the subsequent increase in mobilised suspended solids; and the accidental spillage and / or leaks of contaminants. The associated effects of a reduction of surface water quality could potentially extend for a considerable distance downstream of the location of the accidental pollution event or the discharge.

156 North-west Irish Sea SPA occurs downstream of the Proposed Development. Water quality impacts have the potential to indirectly affect the conservation objectives of the SCI bird species, through habitat degradation as a result of water quality degradation. Therefore, (albeit unlikely) this reduction in water quality (either alone or in combination with other pressures on water quality) could result in the degradation of sensitive habitats present within this European site, which in turn would negatively affect the SCI bird species that utilise these habitats as foraging and / or roosting habitat. It could also negatively affect the quantity and quality of prey available to SCI bird species. These potential impacts could occur to such a degree that they result in significant effects which could have implications for the conservation objectives of North-west Irish Sea SPA.

6.2.3.2 Summary

157 Table 9 below presents a summary of the potential impacts of the Proposed Development on the SCIs of North-west Irish Sea SPA, and how these impacts relate to affecting the site's conservation objectives.

Table 9: Potential Impacts/Effects on the Conservation Objectives of North-west Irish Sea SPA

Conservation Objectives **Attribute/Measure/Target**	**Potential Impacts Requiring Mitigation?**	**Are mitigation measures required?**	**Residual Impacts?**
North-west Irish Sea SPA [004236]			
Red-throated Diver *Gavia stellata* [A001], Great Northern Diver *Gavia immer* [A003], Common Scoter *Melanitta nigra*[A065], Black-headed Gull *Chroicocephalus ridibundus* [A179], Common Gull *Larus canus* [A182], Great Black-backed Gull *Larus marinus* [A187], Little Gull *Hydrocoloeus minutus* [A862] To maintain the favourable conservation condition of Red-throated diver, Great northern diver, Common scoter, Black-headed gull, Common gull, Great black-backed gull, and Little gull at North-west Irish Sea SPA, which is defined by the following list of attributes and targets:			
Non-breeding population size / Number / No significant decline	Yes An accidental pollution event during construction or operation could affect surface water inputting to the Knockharley Stream and downstream in the River Nanny. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the habitats and the fauna communities they support.	Yes The mitigation measures described in Section 6.1.4.1 to protect water quality in the receiving environment will ensure that surface and ground water quality inputting to the Knockharley Stream is protected during construction and operation of the Proposed Development.	No
Spatial distribution / Hectares, time and intensity of use / 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 and abundance / Location and hectares, and forage biomass / Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target			
Disturbance across the site / Intensity, frequency, timing and duration / 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 and site use / Number; location; shape; area (hectares) / 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			
Fulmar *Fulmarus glacialis* [A009], Herring Gull *Larus argentatus* [A184], Kittiwake *Rissa tridactyla* [A188] To restore the favourable conservation condition of Fulmar, Herring gull, and Kittiwake in North-west Irish Sea SPA, which is defined by the following list of attributes and targets:			
Population Size / Number / Long term SPA population trend is stable or increasing	Yes	Yes	No

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Spatial distribution / Hectares, time and intensity of use / Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population	An accidental pollution event during construction or operation could affect surface water inputting to the Knockharley Stream and downstream in the River Nanny. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the habitats and the fauna communities they support.	The mitigation measures described in Section 6.1.4.1 to protect water quality in the receiving environment will ensure that surface and ground water quality inputting to the Knockharley Stream is protected during construction and operation of the Proposed Development.	
Forage spatial distribution, extent, abundance and availability / Location and hectares, and forage biomass / Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target			
Disturbance across the site / Intensity, frequency, timing and duration / 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 / Number; location; shape; area (hectares) / 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			
Manx Shearwater *Puffinus puffinus* [A013], Lesser Black-backed Gull *Larus fuscus* [A183], Roseate Tern *Sterna dougallii* [A192], Common Tern *Sterna Hirundo* [A193], Arctic Tern *Sterna paradisaea* [A194], Little Tern *Sterna albifrons* [A195] To maintain the favourable conservation condition of Manx shearwater, Lesser black-backed gull, Roseate tern, Common tern, Arctic tern, and Little tern in North-west Irish Sea SPA, which is defined by the following list of attributes and targets:			
Breeding population size / Number / No significant decline	Yes An accidental pollution event during construction or operation could affect surface inputting to the Knockharley Stream and downstream in the River Nanny. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the	Yes The mitigation measures described in Section 6.1.4.1 to protect water quality in the receiving environment will ensure that surface and ground water quality inputting to the Knockharley Stream is protected during construction and operation of the Proposed Development.	No
Spatial distribution / Hectares, time and intensity of use / 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 / Location and hectares, and forage biomass / Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Disturbance across the site / Intensity, frequency, timing and duration / 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	habitats and the fauna communities they support.		
Barriers to connectivity / Number; location; shape; area (hectares) / 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			
Cormorant *Phalacrocorax carbo* [A017], Shag *Phalacrocorax aristotelis* [A018], Puffin *Fratercula arctica* [A204] To maintain the favourable conservation condition of Cormorant, Shag, and Puffin in North-west Irish Sea SPA, which is defined by the following list of attributes and targets:			
Breeding Population Size / Number / Long term population trend within the SPA is stable or increasing	Yes An accidental pollution event during construction or operation could affect surface water inputting to the Knockharley Stream and downstream in the River Nanny. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the habitats and the fauna communities they support.	Yes The mitigation measures described in Section 6.1.4.1 to protect water quality in the receiving environment will ensure that surface and ground water quality inputting to the Knockharley Stream is protected during construction and operation of the Proposed Development.	No
Spatial distribution / Hectares, time and intensity of use / 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 / Location and hectares, and forage biomass / Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target			
Disturbance across the site / Intensity, frequency, timing and duration / 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 / Number; location; shape; area (hectares) / 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			

Conservation Objectives Attribute/Measure/Target	Potential Impacts Requiring Mitigation?	Are mitigation measures required?	Residual Impacts?
Guillemot *Uria aalge* [A199], Razorbill *Alca torda* [A200] To maintain the favourable conservation condition of Guillemot and Razorbill in North-west Irish Sea SPA, which is defined by the following list of attributes and targets:			
Population size / Number / No significant decline	Yes An accidental pollution event during construction or operation could affect surface water inputting to the Knockharley Stream and downstream in the River Nanny. An accidental pollution event of a sufficient magnitude, either alone or cumulatively with other pollution sources, could affect the quality of the habitats and the fauna communities they support.	Yes The mitigation measures described in Section 6.1.4.1 to protect water quality in the receiving environment will ensure that surface and ground water quality inputting to the Knockharley Stream is protected during construction and operation of the Proposed Development.	No
Spatial distribution / Hectares, time and intensity of use/ 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 / Location and hectares, and forage biomass / Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target			
Disturbance across the site / Intensity, frequency, timing and duration / 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 / Number; location; shape; area (hectares) / 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			

6.2.4 Mitigation Measures

158 This section presents the mitigation measures that will be implemented during construction and operation to avoid or reduce the potential impacts of the Proposed Development on North-west Irish Sea SPA. All of the mitigation measures will be implemented in full and are best practice, and tried and tested, effective control measures to protect the receiving environment.

6.2.4.1 Measures to Protect Surface Water Quality during Construction

159 In terms of mitigation, the mitigation measures in Section 6.1.4.1 detail the design and controls and management measures for avoiding, preventing, or reducing any significant negative effects on the surface water environment during the Construction Phase of the Proposed Development.

6.2.5 Residual Impacts

160 With the effective implementation of appropriate mitigation measures identified in this NIS, the Proposed Development poses no risk of affecting the conservation objectives, or the favourable conservation condition, of the SCIs of North-west Irish Sea SPA, and there are therefore, no residual direct or indirect impacts associated with the Proposed Development that could adversely affect the integrity of North-west Irish Sea SPA.

6.2.6 Conclusion of Assessment for North-west Irish Sea SPA

161 Following an examination, analysis and evaluation in light of best scientific knowledge, of all relevant information in respect of the Special Conservation Interests of North-west Irish Sea SPA, the potential impacts and mitigation measures, and whether or not the predicted impacts would affect the conservation objectives that support the conservation condition of the SCIs, it has been concluded that the Proposed Development does not pose a risk of adversely affecting (either directly or indirectly) the integrity of North-west Irish Sea SPA.

7 In Combination Assessment

This section of the NIS presents the assessment carried out to examine whether other plans or projects have the potential to act in combination with the Proposed Development to adversely affect the integrity of the River Nanny Estuary and Shore SPA and North-west Irish Sea SPA.

All other European sites fall beyond the zone of influence of the Proposed Development. Therefore, there is no potential for any other plans or projects to act in combination with the Proposed Development to adversely affect the integrity of any of these other European sites.

7.1 Analysis of Potential In Combination Effects

162 As assessed in Section 6, none of the potential impacts, following the full implementation of the prescribed mitigation measures associated with the Proposed Development will result in any perceptible residual effect on the receiving environment or on the Qualifying Interests/Special Conservation Interests of River Nanny Estuary and Shore SPA and North-west Irish Sea SPA. Therefore, there will not be any residual impacts associated with the Proposed Development that will adversely affect the conservation objectives supporting the conservation condition of the QIs/SCIs of those European sites, and the Proposed Development in isolation will not adversely affect the integrity of those European sites.

163 There is the potential for pollution sources from other projects within the Knockharley Stream, Nanny[Meath]_SC_010 subcatchment, and Nanny[Meath]_SC_020 subcatchment, or any other catchments that also drain to the River Nanny estuary along the eastern coastline to cumulatively affect water quality in the receiving estuarine and marine environments. Additionally, any projects adjacent to the Proposed Development may cumulatively affect fauna by disturbance. The projects included for assessment in were accessed

164 The potential for in combination effects to arise from any existing or proposed land use plans or developments is regulated and controlled by the environmental protective policies and objectives of the Meath County Development Plan 2021-2027. Any existing/proposed plan or project that could potentially affect European sites in combination with the Proposed Development, must adhere to these overarching environmental protective policies and objectives. These policies and objectives will ensure the protection of the European site within the zone of influence of the Proposed Development, and include the requirement for any future plans or projects to undergo Screening for Appropriate Assessment and/or Appropriate Assessment to examine and assess their effects on European sites, alone and in combination with other plans and projects.

165 Table 10 lists the overarching plans and projects consider in the In combination assessment, whilst the pairwise assessment of Plan and Projects is presented in Appendix IV.

7.2 Plan Level Environmental Protection Policies and Objectives

166 There are specific objectives and policies in the Meath County Development Plan 2021-2027 to protect biodiversity, and specifically European sites. The policies and objectives HER POL 31, HER OBJ 33, and HER OBJ 34 relate to the protection of European sites, AA and commitments to not permitting projects giving rise to adverse effects on the integrity of European sites without demonstrating there are no alternatives, there are imperative reasons of overriding public interest, and undertaking all compensation measures necessary to ensure the overall coherence of the network of European sites.

167 The Meath County Development Plan 2021-2027 also includes policies to protect water quality, wetland sites, peatlands, and estuaries (HER POL 45, HER POL 47, HER POL 48, HER POL 50). There are also level environmental protection policies from the Regional Spatial & Economic Strategy - Eastern and Midland Region 2019-2031 (RSES), Meath Heritage Plan 2015-2020, Meath Biodiversity Plan 2015-2020, Meath County Council Climate Action Plan 2024-2029. These are fully detailed in Appendix I

168 The Proposed Development is compliant with all the plan level biodiversity protection policies and objectives described above. Furthermore, the Proposed Development will not prevent the achievement of

any of these plan level biodiversity protection policies and objectives across the identified potential impact pathways.

Table 10 Plans and Projects Considered for the In Combination Assessment

National Plans
National Development Plan Ireland 2021-2030
National Energy & Climate Plan 2021-2030
Project Ireland 2040 – National Planning Framework
Climate Action Plan 2025
4th National Biodiversity Action Plan 2023-2030
National Air Pollution Control Programme (NAPCP) Report 4
National Water Resources Plan – Framework Plan 2021
Eastern - Midlands Region Waste Management Plan 2015 - 2021
National Waste Management Plan for a Circular Economy 2024-2030
Regional Plans
Regional Spatial & Economic Strategy – Eastern and Midland Region 2019-2031 (RSES)
Eastern Catchment Flood Risk Assessment and Management (CFRAMS) Study
River Basin Management Plan for Ireland 2022-2027
County/Local Plans
Meath County Development Plan 2021-2027
Meath Heritage Plan 2015-2020
Meath Biodiversity Plan 2015-2020
Meath County Council Climate Action Plan 2024-2029
Projects[38]
N2 Slane Bypass (Planning ref: ABP-318573-23)
Curraghtown Gas-fired power plant (Planning ref: Meath County Council - 2460842)
Highfield Solar Limited Solar Farm (Planning ref: Meath County Council - LB/160898)
DART + Coastal North Railway (Planning ref: Dublin City Council - NA29N.320164)
Highfield Solar Limited Solar Farm (Not submitted currently)

7.3 Conclusion of In Combination Assessment

169 As the Proposed Development itself will not have any effects on the conservation objectives of any European sites, and considering the protective environmental policies and objectives in the Meath County Development Plan 2021-2027 and more widely across all of the other land use plans that seek to protect surface water quality in the catchments that drain to Nanny Estuary, there is no potential for any other plan or project to adversely affect the integrity of any European sites in combination with the Proposed Development.

[38] Projects were accessed on their relevant planning portals on 31 August 2025.

170 The in combination assessment of Plans and Projects (Appendix IV) has concluded that there is no potential for adverse effects on the integrity of any European sites including those within its ZoI, to arise as a consequence of the Proposed Scheme in combination with any other plans or projects, as in consideration of the mitigation measures (detailed in Section **Error! Reference source not found.** and cross referenced in Section 6.2.4) of this NIS, no adverse effects on European site integrity will arise from the implementation of the Proposed Development.

171 The implementation of, and adherence to, the policies and objectives set out in Section **Error! Reference source not found.** and Appendix I will ensure the protection of European sites across all identified potential impact pathways, and will include the requirement for any future project to undergo Screening for Appropriate Assessment and / or Appropriate Assessment as appropriate.

172 As the Proposed Development will not affect the integrity of European sites within its ZoI, and given the protection afforded to European sites under the overarching land use plans, it has been concluded that there will be no adverse effects on the integrity of any European sites to arise as a consequence of the Proposed Development acting in combination with any other plans or projects.

173 Table 1 and Table 2 presented in Appendix IV show the results of a pairwise assessment of the Proposed Development in combination with plans and projects, respectively. This assessment found that there will be no adverse effects on the integrity of any European sites as a consequence of the Proposed Scheme acting in combination with each of these plans and projects.

174 Furthermore, for the same reasons, there will be no adverse effects on the integrity of any European sites as a consequence of the Proposed Development acting in combination with any, some or indeed all taken together, of these plans or projects. Therefore, the Proposed Development will not adversely affect the integrity of any European sites, either alone or in combination with any other plans or projects.

8 NIS Conclusion

175 This NIS has examined and analysed, in light of the best scientific knowledge, with respect to those European sites within the zone of influence of the Proposed Development, the potential impact sources and pathways, the manner in which these could potentially impact on the sites' Qualifying Interests habitat and species , and Special Conservation Interest species and whether the predicted impacts would adversely affect the integrity of River Nanny Estuary and Shore SPA and North-west Irish Sea SPA. There are no other European sites at risk of effects from the Proposed Development.

176 Proposed Development design requirements, Avoidance, and mitigation measures are set out within this NIS (and its appendices) and the effective implementation of these mitigation measures will ensure that any impacts on the conservation objectives of European sites will be avoided during the construction, operation and decommissioning Phases of the Proposed Development, such that there will be no adverse effects on any European sites.

177 It has been objectively concluded by Scott Cawley Ltd., following an examination, analysis and evaluation of the relevant information, including in particular the nature of the predicted impacts from the Proposed Development and the effective implementation of the prescribed mitigation measures (including design mitigation), that the Proposed Development will not adversely affect (either directly or indirectly) the integrity of any European site, either alone or in combination with other plans or projects.

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Appendix I: Planning polices/objectives relating to the protection of European sites, Biodiversity and water quality

Eastern and Midland Regional Assembly, regional Spatial and Economic Strategy 2019-2023
Regional Policy Objective 3.4 Ensure that all plans, projects and activities requiring consent arising from the Regional Spatial and Economic Strategy are subject to the relevant environmental assessment requirements including SEA, EIA and AA as appropriate. In addition, the future strategic development of settlements throughout the Region will have full cognisance of the legal requirements pertaining to sites of International Nature Conservation Interest.
Regional Policy Objective 3.5 Identification of suitable employment and residential lands and suitable sites for infrastructure should be supported by a quality site selection process that addresses environmental concerns such as landscape, cultural heritage, ensuring the protection of water quality, flood risks and biodiversity as a minimum.
Regional Policy Objective 3.6 City and county development plans shall undergo assessment of their impact on carbon reduction targets and shall include measures to monitor and review progress towards carbon reduction targets.
Regional Policy Objective 3.7 Local authorities shall have regard to environmental and sustainability considerations for meeting sustainable development targets and climate action commitments, in accordance with the National Adaptation Framework. In order to recognise the potential for impacts on the environment, Local authorities shall address the proper site/route selection of any new development and examine environmental constraints including but not limited to biodiversity, flooding, landscape, cultural heritage, material assets, including the capacity of services to serve any new development.
Regional Policy Objective 4.56 Support enhancement and expansion of Wicklow port and harbour, to expand commercial berthing and pleasure craft capacity subject to a feasibility study with particular focus on avoiding adverse impacts on the integrity of adjacent European Sites.
Regional Policy Objective 4.76 Support the sustainable development of environmentally sensitive, low intensity amenity development associated with the Barrow Blueway subject to compliance with the Habitats and Birds Directive and Floods Directive.
Regional Policy Objective 6.17 Support the maintenance of, and enhanced access to state and semi-state lands such as National Parks, Forest Parks, Waterways, etc., together with Monuments and Historic Properties, for recreation and tourism purposes. Access should be planned and managed in a sustainable manner that protects environmental sensitivities, ecological corridors, and the ability of local infrastructure to support increased tourism.
Regional Policy Objective 7.2 To achieve and maintain 'Good Environmental Status' for marine waters and to ensure the sustainable use of shared marine resources in the Region, and to promote the development of a cross-boundary and cross-border strategic management and stakeholder engagement framework to protect the marine environment.
Regional Policy Objective 7.10 Support the implementation of the Water Framework Directive in achieving and maintaining at least good environmental status for all water bodies in the Region and to ensure alignment between the core objectives of the Water Framework Directive and

other relevant Directives, River Basin Management plans and local authority land use Plans.
Regional Policy Objective 7.11 For water bodies with 'high ecological status' objectives in the Region, Local authorities shall incorporate measures for both their continued protection and to restore those water bodies that have fallen below high ecological status and are 'At Risk' into the development of local planning policy and decision making any measures for the continued protection of areas with high ecological status in the Region and for mitigation of threats to water bodies identified as 'At Risk' as part of a catchment-based approach in consultation with the relevant agencies. This shall include recognition of the need to deliver efficient wastewater facilities with sufficient capacity and thus contribute to improved water quality in the Region.
Regional Policy Objective 7.12 Future statutory land use plans shall include Strategic Flood Risk Assessment (SFRA) and seek to avoid inappropriate land use zonings and development in areas at risk of flooding and to integrate sustainable water management solutions (such as SUDS, non-porous surfacing and green roofs) to create safe places in accordance with the Planning System and Flood Risk Assessment Guidelines for Local authorities.
Regional Policy Objective 7.15 Local authorities shall take opportunities to enhance biodiversity and amenities and to ensure the protection of environmentally sensitive sites and habitats, including where flood risk management measures are planned.
Regional Policy Objective 7.16 Support the implementation of the Habitats Directives in achieving an improvement in the conservation status of protected species and habitats in the Region and to ensure alignment between the core objectives of the EU Birds and Habitats Directives and local authority development plans.
Regional Policy Objective 7.17 Facilitate cross boundary co-ordination between local authorities and the relevant agencies in the Region to provide clear governance arrangements and coordination mechanisms to support the development of ecological networks and enhanced connectivity between protected sites whilst also addressing the need for management of alien invasive species and the conservation of native species.
Regional Policy Objective 7.26 Support the development of guidance for assessment of proposed land zonings in order to achieve appropriate riparian setback distances that support the attainment of high ecological status for water bodies, the conservation of biodiversity and good ecosystem health, and buffer zones from flood plains.
Regional Policy Objective 7.29 Support collaboration between local authorities, the Bord na Mona Transition Team and relevant stakeholders and the development of partnership approaches to integrated peatland management for a just transition that incorporate any relevant policies and strategies such as the Bord na Móna Biodiversity Plan 2016-2021 and the national Climate Mitigation and Adaptation Plans. This shall include support for the rehabilitation and/or

re-wetting of suitable peatland habitats.
Regional Policy Objective 8.10 The RSES supports delivery of the road projects set out in Table 8.4 subject to the outcome of appropriate environmental assessment and the planning process.
Regional Policy Objective 8.24 EMRA supports the undertaking of feasibility studies to determine the carrying capacity of ports in relation to potential for likely significant effects on associated European sites including SPAs and SA
Regional Policy Objective 10.1 Local authorities shall include proposals in development plans to ensure the efficient and sustainable use and development of water resources and water services infrastructure in order to manage and conserve water resources in a manner that supports a healthy society, economic development requirements and a cleaner environment.
Regional Policy Objective 10.7 Local authority Core Strategies shall demonstrate compliance with DHPLG Water Services Guidelines for Local authorities and demonstrate phased infrastructure – led growth that is commensurate with the carrying capacity of water services and prevent adverse impacts on the integrity of water dependent habitats and species within the Natura 2000 network.

Meath County Development Plan 2021-2027
HER POL 31 To ensure that the ecological impact of all development proposals on habitats and species are appropriately assessed by suitably qualified professional(s) in accordance with best practice guidelines
HER OBJ 33 To have regard to the views and guidance of the National Parks and Wildlife Service in respect of proposed development where there is a possibility that such development may have an impact on a designated European or National site or a site proposed for such designation.
HER POL 34 To undertake appropriate surveys and collect data to provide an evidence-base to assist the Council in meeting its obligations under Article 6 of the Habitats Directives (92/43/EEC) as transposed into Irish Law, subject to available resources.
HER OBJ 33 To ensure an Appropriate Assessment in accordance with Article 6(3) and Article 6(4) of the Habitats Directives (92/43/EEC) and in accordance with the Department of Environment, Heritage and Local Government Appropriate Assessment of Plans and Projects in Ireland –Guidance for Planning Authorities, 2009 and relevant EPA and European Commission guidance documents, is carried out in respect of any plan or project not directly connected with or necessary for the management of the site but likely to have a significant effect on a Natura 2000 site(s), either individually or in-combination with other plans or projects, in view of the site's conservation objectives.
HER OBJ 34 To protect and conserve the conservation value of candidate Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas and proposed Natural Heritage Areas as identified by the Minister for the Department of Culture, Heritage and the Gaeltacht and any other sites that may be proposed for designation during the lifetime of this Plan in accordance with the provisions of the Habitats and Birds

Directives and to permit development in or affecting same only in accordance with the provisions of those Directives as transposed into Irish Law.
HER POL 45 To ensure that peatland areas which are designated (or proposed for designation) as NHAs, SACs or SPAs are conserved for their ecological, climate regulation, archaeological, cultural and educational significance.
HER POL 47 To protect the ecological, recreational, educational, amenity and flood alleviation potential of navigational and non-navigational waterways within the County, towpaths and adjacent wetlands.
HER POL 48 To manage, enhance and protect the wetlands of the County having regard to the 'County Meath Wetland Survey 2010' and ensure that there is an appropriate level of assessment in relation to proposals which would involve draining, reclaiming or infilling of wetland habitats.
HER POL 50 To ensure that the County's natural coastal defences, such as beaches, sand dunes, coastal wetlands and estuaries are not compromised by inappropriate works or development.

Appendix II: Bird Species Identified during the Winter Bird Surveys

Common Name	Scientific Name	Max. Count Observed[39]	BoCCI[40]	SCI[41]	Annex I	SCI Species of SPA Wintering Population within ZoI of the Project
buzzard	*Buteo buteo*	1	Green	No	No	No
chaffinch	*Fringilla coelebs*	3	Green	No	No	No
goldcrest	*Regulus regulus*	3	Amber	No	No	No
goldfinch	*Carduelis carduelis*	2	Green	No	No	No
great black-backed gull	*Larus marinus*	24	Green	No	No	North West Irish Sea SPA
greenfinch	*Chloris chloris*	2	Amber	No	No	No
grey heron	*Ardea cinerea*	3	Green	Yes	No	No
herring gull	*Larus argentatus*	1666	Amber	Yes	No	North West Irish Sea SPA, River Nanny Estuary and shore SPA
hooded crow	*Corvus corone*	2	Green	No	No	No
jackdaw	*Corvus monedula*	25	Green	No	No	No
lesser black-backed gull	*Larus fuscus*	44	Amber	Yes	No	North West Irish Sea SPA
magpie	*Pica pica*	1	Green	No	No	No
mallard	*Anas platyrhynchos*	22	Amber	Yes	No	No
meadow pipit	*Anthus pratensis*	1	Red	No	No	No
mute swan	*Cygnus olor*	1	Amber	No	No	No
pied wagtail	*Motacilla alba yarrellii*	7	Green	No	No	No
raven	*Corvus corax*	3	Green	No	No	No
robin	*Erithacus rubecula*	2	Green	No	No	No
Rook	*Corvus frugilegus*	107	Green	No	No	No
Skylark	*Alauda arvensis*	4	Amber	No	No	No
Song Thrush	*Turdus philomelos*	1	Green	No	No	No
Woodpigeon	*Columba palumbus*	1	Green	No	No	No

Appendix III: Bird Species Identified during the Breeding Bird Surveys

Common Name	Scientific Name	Number of Records	Max. Count Observed[39]	BoCCI[40]	SCI[41]	Annex I
Blackbird	*Turdus merula*	35	2	Green	No	No
Blackcap	*Sylvia atricapilla*	13	1	Green	No	No
Blue Tit	*Cyanistes caeruleus*	3	1	Green	No	No
Bullfinch	*Pyrrhula pyrrhula*	2	2	Green	No	No
Chaffinch	*Fringilla coelebs*	25	2	Green	No	No
Chiffchaff	*Phylloscopus collybita*	10	1	Green	No	No
Coal Tit	*Periparus ater*	1	1	Green	No	No
Dunnock	*Prunella modularis*	6	1	Green	No	No
Goldcrest	*Regulus regulus*	5	1	Amber	No	No
Goldfinch	*Carduelis carduelis*	5	1	Green	No	No
Great Tit	*Parus major*	5	1	Green	No	No
Grey Heron	*Ardea cinerea*	2	1	Green	Yes – No SPA in ZoI of Proposed Development	No
Herring Gull	*Larus argentatus*	20	10	Amber	Yes - North West Irish Sea SPA, River Nanny Estuary and shore SPA	No
Hooded Crow	*Corvus corone*	20	10	Green	No	No
House Martin	*Delichon urbicum*	7	7	Amber	No	No
House Sparrow	*Passer domesticus*	3	1	Amber	No	No
Jackdaw	*Corvus monedula*	5	3	Green	No	No
Jay	*Garrulus glandarius*	2	1	Green	No	No

[39] 'Max. Count Observed' represents the maximum number of individuals recorded within any survey site during any single survey session.

[40] Birds of Conservation Concern in Ireland (BoCCI) status after Gilbert, G., Stanbury, A. & Lewis, L. (2021) Birds of Conservation Concern in Ireland 2020-2026. *Irish Birds* **43:**1-22.

[41] Special Conservation Interests (SCI) species are Annex I birds, and migratory birds and their habitats for which sites are selected for SPA designation.

Common Name	Scientific Name	Number of Records	Max. Count Observed[39]	BoCCI[40]	SCI[41]	Annex I
Linnet	*Linaria cannabina*	2	1	Amber	No	No
Long-Tailed Tit	*Aegithalos caudatus*	3	1	Green	No	No
Magpie	*Pica pica*	1	1	Green	No	No
Mallard	*Anas platyrhynchos*	22	9	Amber	Yes - No SPA in ZoI of Proposed Development	No
Meadow Pipit	*Anthus pratensis*	27	4	Red	No	No
Mistle Thrush	*Turdus viscivorus*	1	1	Green	No	No
Mute Swan	*Cygnus olor*	2	1	Amber	No	No
Pheasant	*Phasianus colchicus*	5	3	Green	No	No
Pied Wagtail	*Motacilla alba yarrellii*	6	2	Green	No	No
Raven	*Corvus corax*	13	5	Green	No	No
Reed Bunting	*Emberiza schoeniclus*	3	1	Green	No	No
Robin	*Erithacus rubecula*	14	1	Green	No	No
Rook	*Corvus frugilegus*	9	3	Green	No	No
Skylark	*Alauda arvensis*	9	3	Amber	No	No
Song Thrush	*Turdus philomelos*	12	1	Green	No	No
Spotted Flycatcher	*Muscicapa striata*	1	1	Amber	No	No
Starling	*Sturnus vulgaris*	12	11	Amber	No	No
Stonechat	*Saxicola torquatus*	5	2	Green	No	No
Swallow	*Hirundo rustica*	6	4	Amber	No	No
Tree Pipit	*Anthus trivialis*	1	1	Amber	No	No
Treecreeper	*Certhia familiaris*	1	1	Green	No	No
Whitethroat	*Sylvia communis*	3	1	Green	No	No
Willow Warbler	*Phylloscopus trochilus*	15	2	Amber	No	No
Woodpigeon	*Columba palumbus*	53	26	Green	No	No
Wren	*Troglodytes troglodytes*	53	4	Green	No	No

Appendix IV: In Combination Assessment of Plans and Projects

Table 1: In Combination Assessment of Plans

Plan	In Combination Assessment
National Development Plan Ireland 2021-2030	As part of Project Ireland 2040 the National Development Plan sets out the Government's over-arching investment strategy and budget for the period 2021-2030. The plan that aims to balance demand for public investment across all sectors and regions of Ireland with a major focus on the delivery of infrastructure projects. The Plan was not subject to Appropriate Assessment. Given the nature of the capital investment the majority of the projects referenced and funded under the NDP have been or will be subject to EIA and AA. The NDP does not confer planning, it identifies strategic need. Any projects arising from, or supported by the National Development Plan must comply with the relevant statutory planning requirements, and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites, this land use plan is the Meath County Development Plan 2021 - 2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the National Development Plan, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
National Energy & Climate Plan 2021-2030	This National Energy and Climate Plan builds on previous national strategies and sets out in detail objectives regarding the five energy dimensions together with planned policies and measures to ensure that these objectives are achieved. It aims as a fundamental national objective to pursue a trajectory of emissions reduction which is in line with reaching net zero in Ireland by 2050. In relation to transport the

Plan	In Combination Assessment
	plan aims to: make growth less transport intensive through better planning, remote and home-working and modal shift to public transport; and increase the renewable biofuel content of motor fuels. The plan set targets for the conversion of public transport fleets to zero carbon alternatives. There are no specific spatial references in this policy document and therefore, no specific link (in terms of potential impact pathways) between it and European sites within the ZoI of the Proposed Development. The plan is key to considering the on-going evolution of national climate policy included are the obligations of the State under EU law (e.g. the EU Habitats Directive), and the promotion of sustainable development. Considering that, this policy position poses no identifiable risk of resulting in adverse effects on the integrity of any European sites. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the National Energy & Climate Plan, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
Project Ireland 2040 – National Planning Framework	The National Planning Framework (NPF) is a high-level strategic plan to guide future growth and development in Ireland. The NPF makes reference to delivering projects in county Meath. The NPF references projects such as the enhanced regional accessibility from other urban cities, provision of citywide public transport. An Appropriate Assessment was carried out in relation to the NPF. As a high-level strategic Plan, the Plan informed the preparation of subsidiary strategies, such as Regional Spatial and Economic Strategies and other statutory land-use plans such as city and county development plans and local area plans. It does not determine the precise location of any development project or designate or allocate specific land uses, nor does it preclude the consideration of alternatives. As a strategic National Plan, the actions of which can be implemented anywhere, the European sites covering the entirety of the Ireland including Northern Ireland are potentially impacted. The NPF NIS acknowledges that the prediction of effects on European sites was not practical given the nature of the strategic plan. However, at a high level, the potential impact sources to European sites were noted as: habitat loss or destruction; habitat fragmentation or degradation; disturbance to habitats/species; species mortality; alterations to water

Plan	In Combination Assessment
	quality and/or water movement; alterations to air quality; and introduction or spread of invasive species. Section 8 of the NIS prescribed the mitigation strategy to prevent negative effects. The NIS concluded that" the fact that proposals for land use designation and/or proposal for the location for individual projects will be formulated in more detail in the context of these lower tier plans ensures that a meaningful appropriate assessment can be carried out at that time. Having regard to the reasons outlined above, it can be concluded that the NPF would not adversely affect the integrity of a European site (whether individually or in combination with other plans or projects)." Individual projects supported by the NPF must comply with the relevant statutory planning requirements, and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites, this land use plan is the Meath County Development Plan 2021 - 2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the NFP, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
Climate Action Plan 2025	The Plan, which was not subject to AA, provides the Governments' third update to the Climate Action Plan 2019, outlines the actions required to 2035 and beyond, to guide the Governments' joint efforts over the coming years at reducing greenhouse gas emissions. The Plan implements the carbon budgets and sectoral emissions ceilings and sets a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050. It is proposed to be updated annually and will be improved and strengthened when required, allowing us to learn from our experiences in what is a very significant and complex undertaking.

Plan	In Combination Assessment
	Although lacking full implementation detail, there is the potential that Plan actions (identified as a supplementary Annex of Actions 2025) and/or developments implemented under the Plan including individual sectoral plans could affect European sites within the ZoI of the Proposed Development, as it is a National plan, and has the potential to affect European sites across Ireland. Any projects arising from, or supported by the Climate Action Plan 2025 must comply with the relevant statutory planning requirements, and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites, this land use plan is the Meath County Development Plan 2021-2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the Climate Action Plan, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
4th National Biodiversity Action Plan 2023-2030	The purpose of the 4th National Biodiversity Action Plan is to set out the approach to governance and conservation of biodiversity through a series of targeted actions within the Plan. This is underpinned by five strategic objectives aimed at ensuring that Irelands' biodiversity and ecosystems are conserved and restored, delivering benefits essential for all sectors of society and that Ireland contributes to efforts to halt the loss of biodiversity and the degradation of ecosystems in the EU and globally. The strategic objectives lay out a clear framework for Ireland's national approach to biodiversity. As such this Plan will have a positive impact on biodiversity including European sites and their Qualifying Interests/Special Conservation Interests across Ireland.

Plan	In Combination Assessment
	Any projects arising from, or supported by, the Plan must comply with the relevant statutory planning requirements, and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites, this land use plan is the Meath County Development Plan 2021 - 2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As the National Biodiversity Action Plan aims to halt biodiversity loss, there is no risk of the Plan acting in combination with the Proposed Development to adversely affect the integrity of any European sites.
National Air Pollution Control Programme (NAPCP) Report 4	The purpose of the National Air Pollution Control Programme is the main governance instrument by which Ireland as an EU Member State, must ensure that the emission reduction commitments for 2020-2029 and 2030 onwards are met. It is the Programmes intention to improve the quality of the national ecological environment, thus contributing towards maintaining or restoring the conservation condition of the European sites within its ZoI. There are no specific spatial references in this policy document and therefore, no specific link (in terms of potential impact pathways) between it and European sites within the ZoI of the Proposed Development. The Programme is key to considering the on-going evolution of national climate policy including the obligations of the State under EU law (e.g. the EU Habitats Directive), and the promotion of sustainable development. Considering that, this policy position poses no identifiable risk of resulting in adverse effects on the integrity of any European sites. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the National Air Pollution Control Programme, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination

Plan	In Combination Assessment
	effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
National Water Resources Plan – Framework Plan 2021	The purpose of this 25-year Plan is to identify deficiencies and need across the entire water supply area, and to develop plan level capital and operational solutions to detail how Uisce Éireann intend to balance the sustainable supply and demand for drinking water over the short, medium and long term, whilst safeguarding the environment. The Plan was subject to Appropriate Assessment and the preparation of an NIS. Although the Plan lacked project specificity, it identified high-level strategy which will be implemented through future plans and projects, and the potential for future proposals implemented through the Plan to have the potential to have an impact on European sites across the national territory. At a high level, the potential impact pathways arising from the Plan could include: physical loss of habitats/supporting habitat, mortality, habitat degradation – changes in water quality (pollution), habitat degradation – hydrological/ hydrogeological changes, water table/availability and disturbance (including biological disturbance). Projects prioritised by Uisce Éireann and Local Authorities will be required to comply with the statutory planning requirements, and those of the relevant land use plans. The Plan identified how Uisce Éireann intend to provide sustainable and reliable water supply and mitigation in Chapter 8 was prescribed to ensure the protection of European sites in the Plan development process. The NIS concluded nonetheless, that "the draft Framework Plan will not result in adverse effects on the integrity of any European site either alone or in-combination with other plans or projects." All projects arising from, or supported by the Plan, must comply with the relevant statutory planning requirements, and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites, this land use plan is the Meath County Development Plan 2021 - 2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any

Plan	In Combination Assessment
	European sites. Considering the above in relation to the National Water Resources Plan – Framework Plan 2021, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
Eastern - Midlands Region Waste Management Plan 2015 - 2021	The purpose of this plan is to set out a framework for the prevention and management of waste within the region. An Appropriate Assessment was carried out in relation to the waste management plan. As a regional strategic plan, the plan informed the preparation of subsidiary strategies, such as the National Hazardous Waste Management Plan 2014-2020, the National Waste Prevention Programme, and other statutory land-use plans such county development plans and local area plans. It does not determine the precise location of any development project or designate or allocate specific land uses, nor does it preclude the consideration of alternatives. As a strategic regional plan, the actions of which can be implemented anywhere, the European sites covering the entirety of the Ireland are potentially impacted. In the context of European sites, this land use plan is the Meath County Development Plan 2021 - 2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the AA, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the NFP, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
National Waste Management Plan for a Circular Economy 2024-2030	This new national waste policy is a strategic and high-level plan which will inform and give direction to waste planning and management in Ireland over the coming years. The Waste Action Plan for a Circular Economy sets out a range of aims and targets for the State and the measures by which these will be achieved, including increased regulation and measures across various waste areas.

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	The plan is key to considering of national waste policy included are the obligations of the State under EU law (e.g. the EU Habitats Directive), and the promotion of sustainable development. Considering that, this policy position poses no identifiable risk of resulting in adverse effects on the integrity of any European sites. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. With the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
Regional Spatial & Economic Strategy – Eastern and Midland Region 2019-2031 (RSES)	The RSES is a Strategy that does not confer planning nor designate or allocate specific land uses, but supports the implementation of the National Planning Framework (NPF), and the economic policies and objectives of the Government by providing a long-term strategic planning and economic framework for the development of the three regions: Northern and Western; Southern; and Eastern and Midland. An Appropriate Assessment was carried out in relation to the Eastern and Midland Region Strategy. The strategy included all European sites within the region and transboundary impacts to European sites within 15km of the National border. While much of the Strategy is policy based, potential impacts in respect of habitat area reduction, disturbance of key species, habitat/species fragmentation, reduction in species density and changes in key indicators of conservation value in particular water quality and climate change. Potential direct and indirect impacts associated with the location and development of infrastructure where these areas overlap, adjoin, are proximal to or support connectivity with European sites. Section 9 of the NIR prescribed the mitigation strategy, which the high-level Strategy noted would be required to conform to the relevant regulatory provisions aimed at preventing pollution or other environmental effects likely to adversely affect the integrity of European Sites, where applicable and appropriate. The NIR concluded that the Strategy “would not adversely affect the integrity of a European site (whether individually or in combination with other plans or projects subject to application of all the mitigation measures identified in this NIR” [Section 9 of NIR].

Plan	In Combination Assessment
	All projects arising from, or supported by the Strategy, must comply with the relevant statutory planning requirements, and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.,). In the context of European sites, this land use plan is the Meath County Development Plan 2021 - 2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the mitigation measures included within the Strategy, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
Eastern Catchment Flood Risk Assessment and Management (CFRAMS) Study	The purpose of this Study was to assess flood risk and identify viable structural and non-structural options for managing flood risks for localised high-risk areas and within the catchment as a whole. The Study was not subject to Appropriate Assessment. Projects rising out of it could contribute towards maintaining or restoring the conservation condition of the hydrological regime of the European sites within the ZoI but in achieving this there are potential impact pathways by which they could adversely affect the integrity of any European sites. Although the outcomes of the study and requirements arising from it will have a positive impact on water quality its catchments in which the Proposed Development straddles, future developments arising out of the implementation of the Study have the potential to lie either within European sites or be situated in a location where they may be within the ZoI of European sites. The Study set out the strategy, and guidelines required of the local Authorities to incorporate consideration of flood risk identification, assessment and management into the planning process. Implementation of the Guidelines will be achieved through actions at the national, regional, local authority and site-specific levels. All projects arising from, or supported by the Study must comply with

Plan	In Combination Assessment
	the relevant statutory planning requirements, and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites, this land use plan is the Meath County Development Plan 2021 - 2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the CFRAMS, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
River Basin Management Plan for Ireland 2022-2027	The purpose of the River Basin Management Plan is to reduce pollution levels, restore good water quality status and prevent deterioration in water quality in the river basin. Therefore, the Plan will contribute towards maintaining or restoring the conservation condition of the European sites within the ZoI of the Plan and there are no potential impact pathways by which they could adversely affect the integrity of any European sites. The Plan will have a positive impact on water quality across its catchments including the Nanny-Delvin catchment in which the proposed development straddles. Therefore, there is no risk of the Plan acting in combination with the Proposed Development to adversely affect the integrity of any European sites.
Meath County Development Plan 2021-2027	The Meath County Development Plan 2021-2027 is seeking to develop in a sustainable and environmentally sensitive manner across the county. It promotes the climate change agenda, and it sets out the housing and economic priorities for the relevant period up to 2027. The Plan notes both confirmed projects (including at times some project specificity) as well as identifying future developments arising from the Plan e.g., road development and other transport/mobility management infrastructure, and support for third party infrastructural development.

Plan	In Combination Assessment
	The policies, objectives and proposed land use zonings could result in a number of potential impacts to the conservation objectives of European site(s) identified as being within the ZoI of the Plan including: habitat loss, fragmentation and degradation; disturbance to key species; and changes in key indicators of conservation value. A total of 41 European sites (within and extending outside the Meath County Administrative boundary and including the coastal zone) were considered for potential impacts arising from the Plan. It was concluded that owing to the "*application of the mitigation measures provided in Appendix C to E (from draft CDP through to minor alterations to material amendments stages), there would be no adverse effects on integrity of European Sites in isolation or in combination with other Plans and Projects acting in the same area*". As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the Meath County Development Plan 2021-2027, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
Meath Heritage Plan 2015-2020	The aim of the plan is to place heritage at the heart of public life in the county, and the aims, vision and objectives of which will be delivered through a range of strategic actions. The Plan was subject to An Appropriate Assessment Screening and it was concluded that the plan would have no significant adverse impact on Natura 2000 sites, therefore no further Assessment was necessary. Any projects arising from these actions, or supported by the Plan must comply with the relevant statutory planning requirements, and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites, these land use plans are the Meath County Development Plan 2021-2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the AA screening report, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the Meath Heritage Plan 2015-2020,

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	and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.
Meath Biodiversity Plan 2015-2020	The Meath Biodiversity Action Plan (BAP) aims to raise awareness of, increase the knowledge and understanding of biodiversity, through promote the conservation of the natural heritage and biodiversity of the City, whilst maintaining/enhancing the biodiversity resource. The Plan provides a framework for the conservation of biodiversity at a local level and helps ensure that national & international targets for biodiversity conservation can be achieved. The Meath County BAP provides a framework for the conservation of biodiversity at a local level and helps ensure that national and international targets for biodiversity conservation can be achieved, while at same time addressing local priorities. Therefore, overall impacts will be positive. Due to the high-level nature of this Plan, it is not possible to determine with confidence the likely impacts or mitigation measures required yet in detail. Any projects that may arise as a result of this plan will have a project level AA which will assess these in detail and provide suitable mitigation measures where appropriate in accordance with the requirements of the higher level County Development Plan. In the context of European sites, these land use plans are the Meath County Development Plan 2021-2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the Meath County Development Plan 2021-2027, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment in Galway Bay or that would adversely affect the integrity of any European sites.
Meath County Council Climate Action Plan 2024-2029	The Meath County Council Climate Action Plan 2024-2029 is a high-level Plan to address climate change at the County Level and identify current and future climate change impacts and greenhouse gas emission levels in the County, through the development of adaptation and mitigation baselines. It also examines

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	the future impacts that climate change may have on the region and then sets out a first iteration of actions that will be used to reduce the source and effects of these impacts. The plan was subject to a Natura Impact Statement and included a range of mitigation measures in respect of actions arising from the Plan. Key to this was that any projects arising from the Plan must comply with the relevant statutory planning requirements and must be in accordance with the objectives and policies of the relevant land use plans (Development Plans, Local Area Plans etc.). In the context of European sites, these land use plans are the Meath County Development Plan 2021-2027. All of these plans contain objectives and policies to ensure protection of European sites from any projects proposed with the plan area. These protective objectives and policies pursuant to Meath County are presented in Appendix I of the NIS. As concluded in the NIS, and having regard to the mitigation measures detailed therein, the Proposed Development will not have any measurable effect on, and will not adversely affect the integrity of, any European sites. Considering the above in relation to the Meath County Council Climate Action Plan 2024-2029, and the mitigation strategy proposed in the NIS for the Proposed Development, there is no potential for any in combination effects to arise that would affect the receiving environment or that would adversely affect the integrity of any European sites.

Table 11. In Combination Assessment of Projects

Application Reference	Applicant and Brief Description	Decision	Conclusion Regarding In Combination Effect
ABP Planning ref: ABP-318573-23	N2 Slane Bypass The consented development consists of a bypass around Slane, connecting the existing N2 and N51 roads. This development is located 2.3km north of the proposed Development.	Approve with Conditions 27/06/2025	No in combination effect. The Proposed Development must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans). These land use plans contain objectives and policies to ensure the protection of European sites.

Application Reference	Applicant and Brief Description	Decision	Conclusion Regarding In Combination Effect
			The project was subject to planning consent. In granting permission for the project, it would have been necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from the impact pathway of surface water and groundwater networks, either alone or in combination with the Proposed Development. There is no physical overlap between the Proposed Development and the project. The environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Development to avoid significant impacts and that alone the Proposed Development will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Development to have an adverse effect on the integrity of any European sites. The project will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Proposed Development and has included mitigation in that regard to prevent any such adverse effects.
Planning ref: Meath County Council - 2460842	Curraghtown Gas-fired power plant The proposed development consists of a 180 Megawatt gas-fired power plant, consisting of 3 no. open cycle gas turbines and a Liquid fuel storage facility. This development is planned to be located west of Knockharley landfill, directly adjacent to the site.	Approve with Conditions 01/08/2025	No in combination effect. The Proposed Development must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans). These land use plans contain objectives and policies to ensure the protection of European sites. The project was subject to planning consent. In granting permission for the project, it would have been necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from the impact pathway of surface water and groundwater networks, either alone or in combination with the Proposed Development.

Application Reference	Applicant and Brief Description	Decision	Conclusion Regarding In Combination Effect
			There is no physical overlap between the Proposed Development and the project. The environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Development to avoid significant impacts and that alone the Proposed Development will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Development to have an adverse effect on the integrity of any European sites. The project will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Proposed Development and has included mitigation in that regard to prevent any such adverse effects.
Planning ref: Meath County Council - LB/160898	Highfield Solar Limited Solar Farm The consented development consists of a 150.29 hectares of ground-mounted Solar PV panels, two electrical substation buildings and 69 electrical transformer and inverter station modules. The site was primarily agricultural grassland	Grant permission with revised conditions 08/03/2019	No in combination effect. The Proposed Development must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans). These land use plans contain objectives and policies to ensure the protection of European sites. The project was subject to planning consent. In granting permission for the project, it would have been necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from the impact pathway of surface water and groundwater networks, either alone or in combination with the Proposed Development. There is no physical overlap between the Proposed Development and the project. The environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Development to avoid significant impacts and that alone the Proposed Development will not adversely affect the integrity of any European sites, the

Application Reference	Applicant and Brief Description	Decision	Conclusion Regarding In Combination Effect
			project will not act in combination with the Proposed Development to have an adverse effect on the integrity of any European sites. The project will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Proposed Development and has included mitigation in that regard to prevent any such adverse effects.
Planning ref: Dublin City Council - NA29N.320164	DART + Coastal North Railway The proposed development involves the electrification of the existing railway lines, reconfiguring of existing track layouts, construction of new platforms, and the acquisition of additional lands to facilitate this.	Lodged 12/07/2024	No in combination effect. The Proposed Development must comply with all applicable planning and environmental approval requirements and be in accordance with the objectives and policies of the relevant land use plans (Development Plans). These land use plans contain objectives and policies to ensure the protection of European sites. The project is subject to planning consent. In granting permission for the project, it will be necessary to determine that the project will not result in adverse effects on the integrity of any European sites, including from the impact pathway of surface water and groundwater networks, either alone or in combination with the Proposed Development. There is no physical overlap between the Proposed Development and the project. The environmental protection policies included within the relevant land use plans, the range of mitigation measures included in the Proposed Development to avoid significant impacts and that alone the Proposed Development will not adversely affect the integrity of any European sites, the project will not act in combination with the Proposed Development to have an adverse effect on the integrity of any European sites. The project will not adversely affect the integrity of any European sites, in its own right, nor in combination with other projects, including the Proposed

Application Reference	Applicant and Brief Description	Decision	Conclusion Regarding In Combination Effect
			Development and has included mitigation in that regard to prevent any such adverse effects.