

Appropriate Assessment Screening for Amendments to the Large-scale
Residential Development permitted under WCC Reg. Ref. 24/325 at Tinahask
Upper, Money Big, Money Little, Arklow, Co. Wicklow



15th October 2026

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On behalf of: Castlethorn Construction

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Document Control Sheet			
Project	Appropriate Assessment Screening for Amendments to the Large-scale Residential Development permitted under WCC Reg. Ref. 24/325 at Tinahask Upper, Money Big, Money Little, Arklow, Co. Wicklow		
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1. Introduction

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

The following Appropriate Assessment (AA) (Screening Stage) has been prepared by **Altamar Ltd.** at the request of Castlethorn Construction. The project relates to the Amendments to the Large-scale Residential Development permitted under WCC Reg. Ref. 24/325 at Tinahask Upper, Money Big, Money Little, Arklow, Co. Wicklow.

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

1.1 Altamar Ltd.

Since its inception in 2001, Altamar has been delivering ecological and environmental services to a broad range of clients. Operational areas include residential, infrastructural, renewable, oil & gas, private industry, local authorities, EC projects and State/semi-State Departments. Bryan Deegan is the managing director of Altamar. Bryan is an environmental scientist and marine biologist with 30 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture). Bryan Deegan carried out all elements of this Appropriate Assessment Screening.

2. Background to the Appropriate Assessment

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

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

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

As outlined in the EC guidance document on Article 6(4) (January 2007)¹:

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

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

- *Article 6(3) assessment results allow full traceability of the decisions eventually made, including the selection of alternatives and any imperative reasons of overriding public interest.*
- *The assessment should include all elements contributing to the site's integrity and to the overall coherence of the network as defined in the site's conservation objectives and Standard Data Form, and be based on best available scientific knowledge in the field. The information required should be updated and could include the following issues:*
 - *Structure and function, and the respective role of the site's ecological assets;*
 - *Area, representativity and conservation status of the priority and nonpriority habitats in the site;*
 - *Population size, degree of isolation, ecotype, genetic pool, age class structure, and conservation status of species under Annex II of the Habitats Directive or Annex I of the Birds Directive present in the site;*
 - *Role of the site within the biographical region and in the coherence of the European network; and,*
 - *Any other ecological assets and functions identified in the site.*
- *It should include a comprehensive identification of all the potential impacts of the plan or project likely to be significant on the site, taking into account cumulative impacts and other impacts likely to arise as a result of the combined action of the plan or project under assessment and other plans or projects.*
- *The assessment under Article 6(3) applies the best available techniques and methods, to estimate the extent of the effects of the plan or project on the biological integrity of the site(s) likely to be damaged.*
- *The assessment provides for the incorporation of the most effective mitigation measures into the plan or project concerned, in order to avoid, reduce or even cancel the negative impacts on the site.*
- *The characterisation of the biological integrity and the impact assessment should be based on the best possible indicators specific to the European assets which must also be useful to monitor the plan or project implementation.”*

¹ European Commission. (2007). Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission;

3. Stages of the Appropriate Assessment

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

1) Screening stage:

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

2) Appropriate Assessment (Natura Impact Statement):

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

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

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

4. Stage 1 Screening Assessment

4.1 Management of the Site

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

4.2 Project Description

4.2.1 Development Description

The proposed development comprises amendments to the Large-scale Residential Development permitted under WCC Reg. Ref. 24/325 consisting 352no. residential units proposed in a mix of houses and apartment units comprising 334no. houses (44no. 2-bedroom, 241no. 3-bedroom and 49no. 4-bedroom) ranging from 2 to 3 storeys, 18no. apartments (6no. 1-bedroom and 12no. 2-bedroom) in 1no. 4 storey building, 1no. creche (c. 711 sqm) at ground floor of apartment Block A; and all associated and ancillary site development works including on site attenuation, hard and soft landscaping and boundary treatment works, including public open space; communal open space, public lighting; surface car parking; bicycle parking spaces/stores for houses and apartment units; 4no. ESB substations; bin stores; vehicular access via existing Northwood road and railway overbridge from Knockmore roundabout. The proposed development also includes road upgrade works to the existing railway overbridge and the western approach to same including the provision of a 2.5m footpath, 6m carriageway, safety barrier improvement works and other ancillary works required to facilitate these elements.

The site outline, site location, proposed site masterplan, and proposed site sections are shown in Figures 1-5.

4.2.2 Landscape

The landscape strategy for the proposed development has been prepared by Doyle & O'Troithigh to accompany this planning application. The proposed landscape sections are demonstrated in Figures 6-15.



0 0.2 0.4 0.6 0.8 km

Project: Tinahask Upper, Arklow
 Location: Arklow, Co. Wicklow
 Date: 4th August 2026
 Drawn By: Bryan Deegan (Altamar)

ALTEMAR
 Marine & Environmental Consultancy

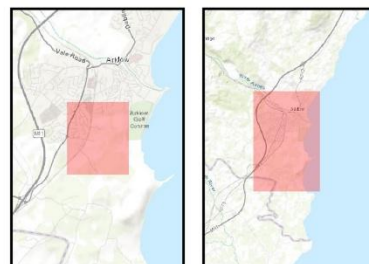


Figure 1. Site Outline



0 0.4 0.8 1.2 1.6 km

Project: Tinahask Upper, Arklow
 Location: Arklow, Co. Wicklow
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 Drawn By: Bryan Deegan (Altamar)

ALTEMAR
 Marine & Environmental Consultancy

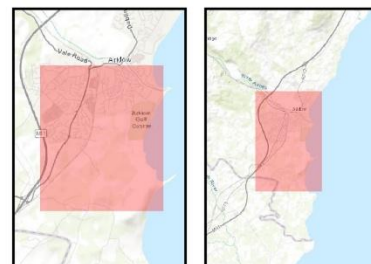


Figure 2. Site Location



Figure 3. Proposed Site Masterplan



Figure 4. Proposed Site Sections (Sheet 1)



Figure 5. Proposed Site Sections (Sheet 2)



Scale: 1" = 10'	North Arrow
1" = 10'	

Doyle & O'Toole Landscape Architecture	Project No. 1501-001 Client: City of Chicago Date: 10/15/15 Scale: 1" = 10'	Sheet No. 1501-001-01 Total Sheets: 1501-001-01 to 1501-001-10 Scale: 1" = 10'
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Figure 6. Landscape Section 1



Scale: 1" = 10'	North Arrow
1" = 10'	

Doyle & O'Toole Landscape Architecture	Project No. 1501-001 Client: City of Chicago Date: 10/15/15 Scale: 1" = 10'	Sheet No. 1501-001-02 Total Sheets: 1501-001-01 to 1501-001-10 Scale: 1" = 10'
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Figure 7. Landscape Section 2



Figure 8. Landscape Section 3



Figure 9. Landscape Section 4



Figure 10. Landscape Section 5



Figure 11. Landscape Section 6



Figure 12. Landscape Section 7



Figure 13. Landscape Section 8

4.2.3 Drainage

The drainage strategy for the proposed development has been prepared by Waterman Moylan Consulting Engineers for the proposed development. It states the following:

“Foul Water Drainage

Introduction

It is proposed to connect the wastewater from the site into Uisce Éireann foul water infrastructure at the northwest of the site. Due to the topography of the site, it is not possible to achieve a gravity connection into this network (Ground level at connection point 35.00m AOD). A foul pumping station will be constructed at the southeastern boundary, the lowest point of the site (15m AOD). The wastewater flows from each unit will outfall into the pumping station via gravity and then be pumped to a discharge manhole at the northwestern boundary via a ø200mm rising main.

A Pre Connection Enquiry was submitted for the subject site as part of this amendment application. A Confirmation of Feasibility (COF) was issued by Uisce Éireann on June 26th, 2026, under CDS26002695. The COF stated that a connection into the existing wastewater network is “feasible without infrastructure upgrades by Uisce Éireann.”

A foul pumping station was included in the granted permission (under WCC Ref: 24/325). The pumping station was located at the northeastern boundary of the site. Waterman Moylan has reviewed the topography of the site and it has proposed to relocate the pumping station to the lowest part of the site at the southeastern boundary. This allows for all units to outfall into the pumping station via gravity. The proposed location of the pumping station allows for a future connection from the school site at the south of the masterplan lands.

Proposed Foul Drainage and Calculations

The foul water drainage for the proposed development has been designed so that the minimum cleansing velocities outlined in the “Uisce Éireann Code of Practice for Wastewater Infrastructure” are achieved for all foul sewers. The peak foul flow is based on Irish Water recommended peak demand / flow factors which are provided in the Uisce Éireann ‘Code of Practice for Wastewater Infrastructure’. Pipe capacities and velocities have been calculated using the Colebrook-White formula with a roughness coefficient (Ks) of 1.5mm.

Surface Water Drainage

Introduction

The surface water management strategy has been carefully developed to incorporate nature-based Sustainable Urban Drainage Systems (SuDS) features throughout the site. These elements are integrated into the overall drainage network to facilitate natural attenuation and support water quality improvements. Features such as permeable paving, bio-retention tree pits, roadside swales, dry detention basins, and petrol interceptors have been strategically located across the development to manage runoff at source, reduce flow rates, and mimic the site's natural hydrological processes. This approach not only addresses surface water quantity and quality but also enhances local biodiversity and contributes positively to the site's visual and ecological character.

Existing Surface Water Drainage

The site is currently a green field in nature with a general slope from west to southeast. There is an existing ditch line which traverses the site naturally draining the site eastwards towards the Irish Sea via Arklow Golf Club lands. It is proposed to maintain this ditch line along the southern boundary, continuing to act as a natural drainage point for the subject site.

Proposed Surface Water Drainage

It is proposed to mimic the existing site drainage profile of the greenfield site by draining the surface water runoff via gravity to the south of the site, outfalling into the existing drainage ditch along the southern boundary of the site. The surface water strategy is to split the drainage areas into four catchments. Each catchment will have an attenuation system and a flow restriction device before outfalls into the existing ditch at the south of the site. To maintain the pre-development greenfield runoff rate, flow control devices will be installed upstream of the discharge point. The surface water strategy for the development has been carefully coordinated focusing on source control measures within a comprehensive surface water management train.

The proposed surface water drainage network discharges to the existing ditch line which ultimately outfalls into the Irish Sea via the Arklow Gold Club lands.

In accordance with the GSDS and Wicklow County Council requirements, the subject development's surface water outfall will be limited to a discharge rate of either 2 l/s/ha or the calculated QBAR (whichever is greater). This results in an allowable outflow rate of 8.47 l/s/ha.

It is proposed that the surface water runoff for the development will be intercepted, collected, slowed, and attenuated through the use of nature-based rainwater management and sustainable urban drainage systems (SUDS). The SUDS for this subject site are summarised below:

- Permeable paving to be used below parking bays within the development
- Bio-retention systems including tree-pits throughout the development
- Roadside swales throughout the development
- A Hydro-Brake upstream of the storm outfall

The proposed SUDS interventions have been implemented to ensure runoff is treated to the standards outlined in the Greater Dublin Strategic Drainage Study and to add value to the biodiversity potential of the development.'

The proposed drainage layout is demonstrated in Figures 16-19.

4.2.4 Flood Risk Assessment

A Site-Specific Flood Risk Assessment been prepared by Waterman Moylan Engineering Consultants to accompany this planning application. This report concludes with the following:

"The subject site has been analysed for risks from tidal and fluvial flooding, pluvial flooding, groundwater, and drainage system failures due to human error or mechanical system failure. Table below presents the various residual flood risks involved. As the flood risk from all sources can be mitigated, reducing the flood risk to low or very low, the proposed development is considered acceptable in terms of flood risk."

Source	Pathway	Receptor	Likelihood	Consequence	Risk	Mitigation Measure	Residual Risk
Coastal	Overland from East	Proposed Development	Negligible	Negligible	Negligible	None needed	Negligible
Fluvial	Overland from North	Proposed Development	Moderate	Moderate	Moderate	Section of stream to be backfilled; remainder to discharge at greenfield runoff rate	Low
Pluvial	Private and Public Drainage Systems	Proposed Development	Low	Low	Extremely Low	None needed	Low
Ground Water	Ground	Proposed Development	Low	Moderate	Low	None needed	Low
Human / Mechanical Error	Drainage network	Proposed Development	High	Moderate	High	Appropriate drainage design, setting FFLs & overland flood routing	Low

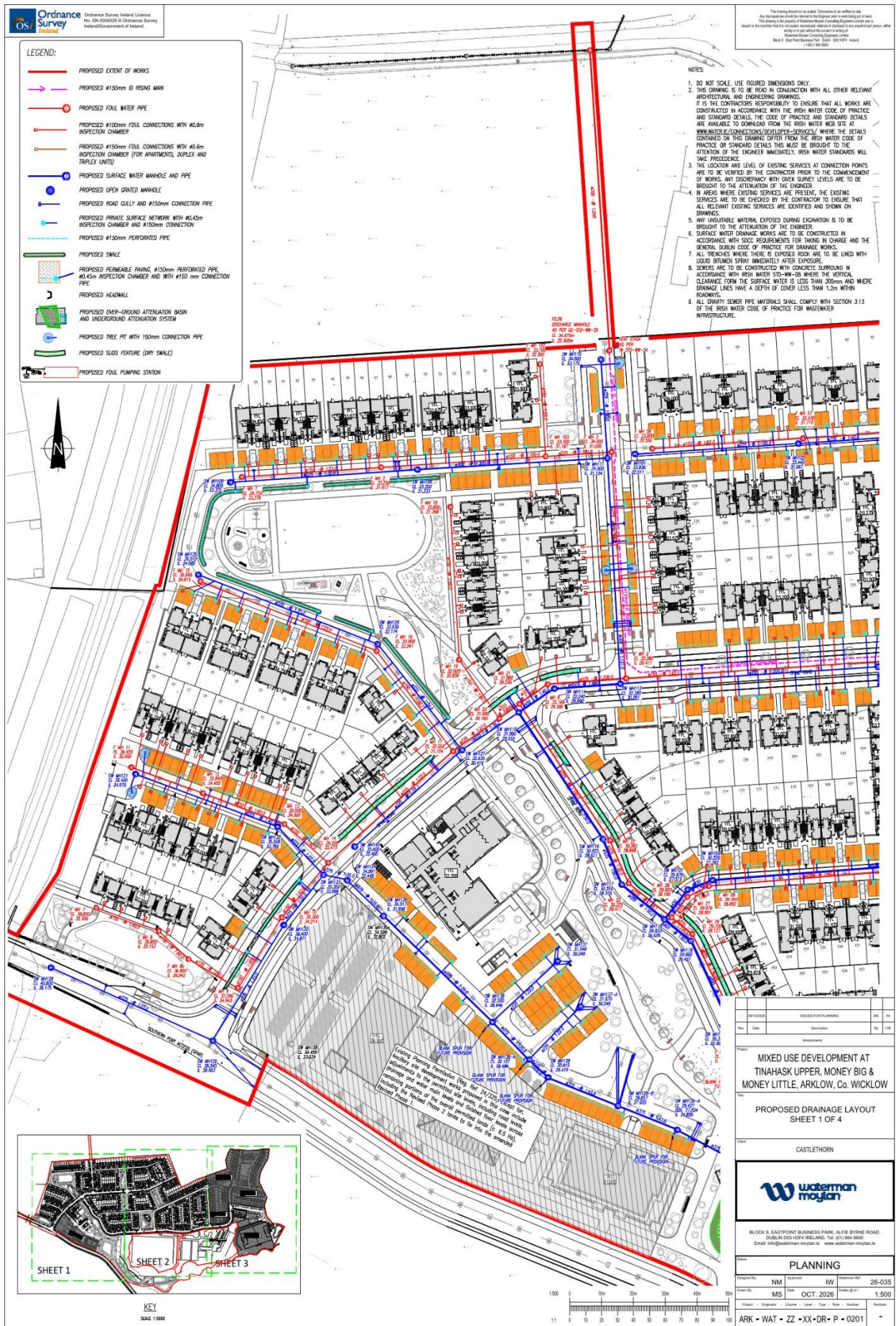


Figure 16. Proposed Drainage Layout (Sheet 1)

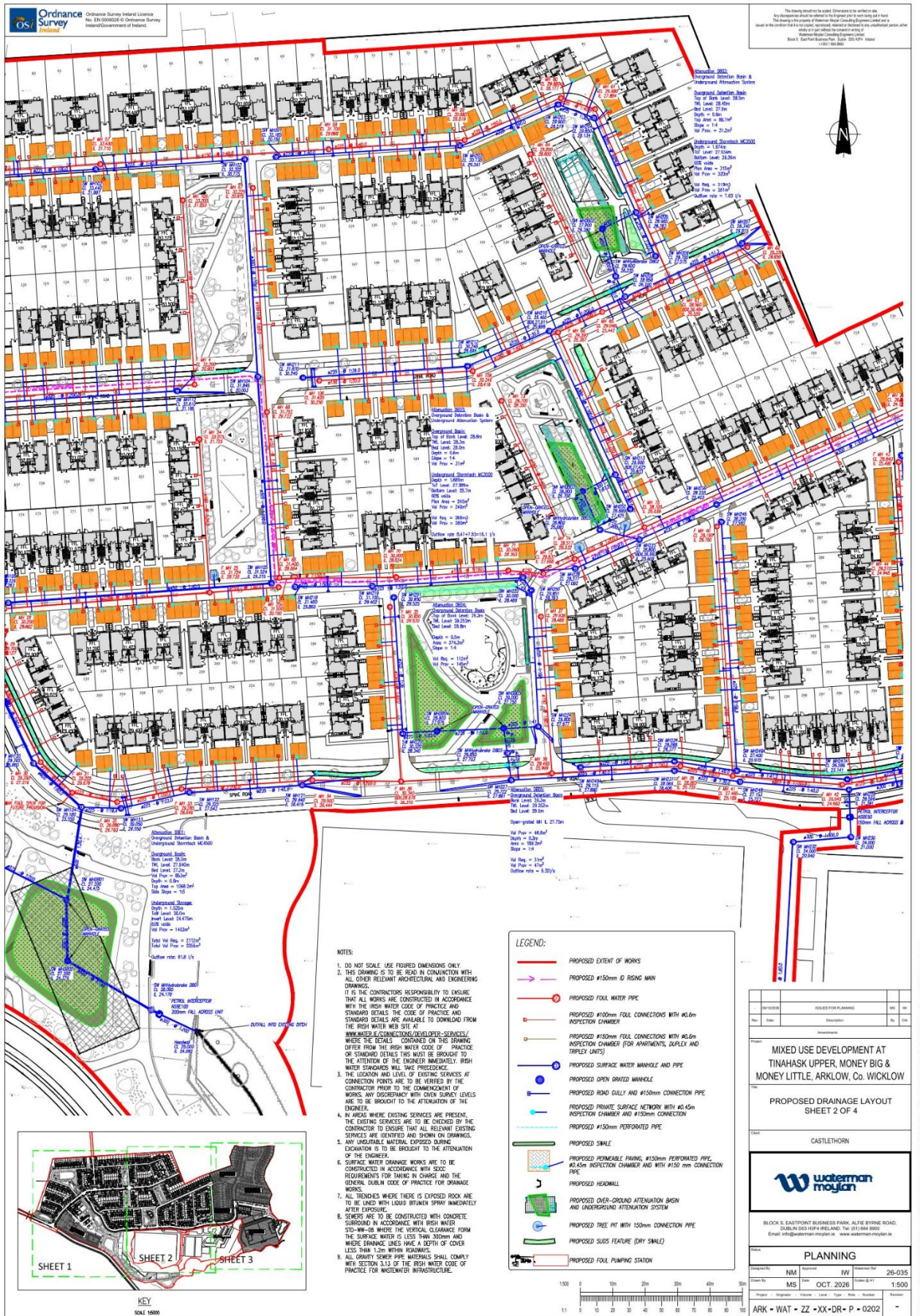


Figure 17. Proposed Drainage Layout (Sheet 2)

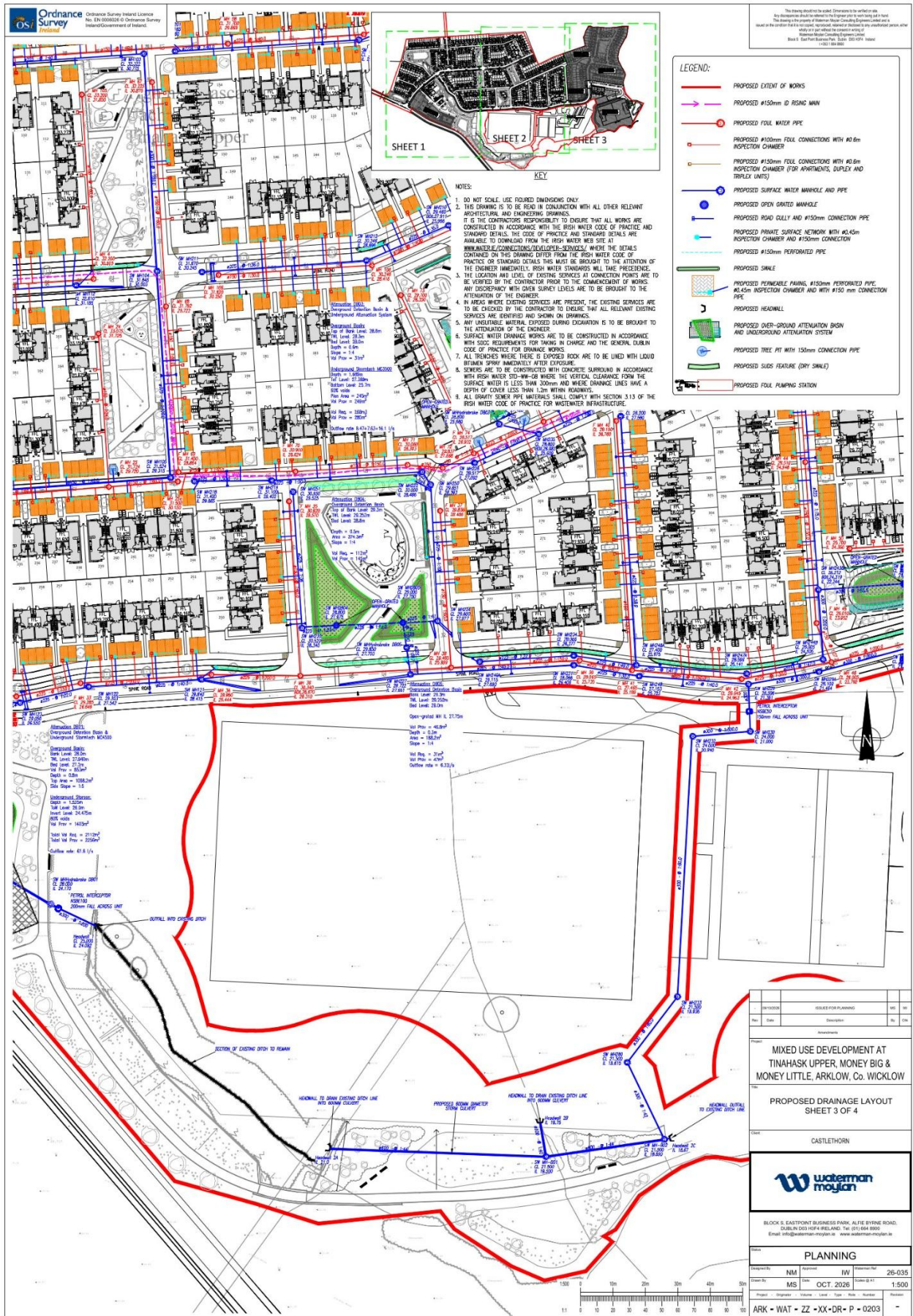


Figure 18. Proposed Drainage Layout (Sheet 3)

4.3 Identification of Relevant Natura 2000 Sites

The proposed development site is not within a European site. As outlined in Office of the Planning Regulator (2021) *“The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source- Pathway-Receptor framework and not by arbitrary distances (such as 15 km).”*

A key factor in the consideration as to whether or not a particular European site is likely to be affected by a development is its distance from the location of the subject site. It is generally, but not necessarily, the case that the greater the distance from the plan or project the smaller the likelihood of impacts. In this case, the nearest European site to the subject site is 4.9 km away (Kilpatrick Sandhills SAC) (Figure 20). The nearest watercourse to the subject site is the Kilmurry Stream which flows through the western portion of the site, continues along the southern boundary and ultimately discharges to the Irish Sea through lands associated with Arklow Golf Club. Foul wastewater from the proposed development will ultimately outfall to the Arklow WwTP, which underwent construction and became fully operational in early 2025. The treated effluent from the Arklow WwTP will discharge to the Irish Sea. There will, therefore, be a weak indirect pathway from the proposed development site to nearby European sites within the Irish Sea, namely Kilpatrick Sandhills SAC (4.9km) and Buckroney-Brittias Dunes and Fen SAC (6.1km). Any silt or pollutants will be treated along this network and, in the absence of mitigation measures, will not impact on the qualifying interests of these SACs.

During operation, after on-site attenuation and SUDS measures, surface water drainage from the proposed development will be discharged to the onsite watercourse (Kilmurray Stream) which flows a short distance (approx. 300m) to the marine environment at Tinahask Lower Bay Beach. There two Natura 2000 sites within 10km of this outfall, namely Kilpatrick Sandhills SAC and Buckroney-Brittias Dunes and Fen SAC and thus a weak indirect hydrological pathway exists. However, given the minimum distance from the proposed development site to these European Sites (4.9km and 6.1km respectively), the scale of the proposed development, and the fact that surface water drainage will be directed to the Kilmurry stream, any dust or silt laden run off that may enter this network will be dispersed, diluted, and ultimately settle within the surface water drainage network, Kilmurry stream and substantial marine environment at Tinahask Bay.

The Zol of the proposed project would be seen to be restricted to the site outline, with potential for minor localised noise and lighting impacts during construction which do not extend significantly beyond the site outline nor are they likely to have any significant effects on any European sites. During construction and operation, there is a hydrological pathway to the Kilmurray Stream. In the absence of standard construction and operational phase mitigation e.g. petrochemical interception there is potential for localised downstream impacts. However, in the absence of these standard measures there would be no significant adverse effects on designated sites downstream of the site via the indirect pathway as pollutants, dust or silt laden run off will be dispersed, diluted, and ultimately settle within the surface water drainage network, Kilmurray Stream and marine environment at Tinahask Bay via the indirect surface water pathway.

Despite a lack of direct hydrological connection to European Sites, but in the interest of carrying out a thorough assessment in line with the Habitats Directive, and the precautionary principle, the area of assessment was expanded beyond the Zol to include designated sites within 15km of the proposed development site, and sites beyond 15km with the potential for a hydrological connection. This was done in the interest of ensuring that any pathways, however indirect or remote, were considered. All European sites within 15km are listed in Table 1. The qualifying interests, and the potential impact of the proposed development on each European site and qualifying interest, are screened out in Table 2. No potential impacts are foreseen on European sites beyond 15km as there is no direct or indirect pathways to these sites.

SACs within 15km of the proposed development site are demonstrated in Figure 20. There are no SPAs within 15km of the proposed development site (Figure 21). Waterbodies and SACs located in proximity to the proposed development are demonstrated in Figures 22 and 23.

Table 1. Proximity to designated sites of conservation importance

Site Code	NATURA 2000 Site	Distance
<i>Special Areas of Conservation</i>		
IE001742	Kilpatrick Sandhills SAC	4.9 km
IE000729	Buckroney-Brittias Dunes and Fen SAC	6.1 km
IE000781	Slaney River Valley SAC	11.8 km

Table 2. Initial screening of NATURA 2000 sites within 15km and NATURA 2000 sites within 15km with potential of hydrological connection to the proposed development

NATURA Code	Name	Screened IN/OUT	Details/Reason
Special Areas of Conservation			
IE001742	Kilpatrick Sandhills SAC	OUT	Conservation Objectives: The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Annual vegetation of drift lines [1210] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>) [2150] Potential Effects The proposed development site is located 4.9 km from this SAC. There is no direct pathway from the proposed development site to this SAC. There is an indirect hydrological connection to this SAC via foul and surface water drainage. Foul wastewater will be directed to the Arklow Wastewater Treatment Plant (WWTP) which underwent construction and became fully operational in early 2025. Foul wastewater drainage will ultimately be treated along this public network and will not significantly impact on the qualifying interests of this SAC. Surface water drainage from the proposed development will be discharged to the onsite watercourse (Kilmurray Stream) which flows a short distance to the marine environment at Tinahask Lower Bay Beach (approx. 300m). Therefore, there is a weak indirect hydrological pathway to this SAC. However, given the minimum distance from the proposed development site to this European Site (4.9km), the scale of the proposed development, and the fact that surface water drainage will be directed to an existing public surface water network, any pollutants, dust or silt laden run off that may enter this network will be dispersed, diluted, and ultimately settle within the surface water drainage network, Kilmurray Stream and substantial marine environment at Tinahask Bay. No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. In the absence of mitigation, no significant effects on the qualifying interests of this SAC are likely.

			No significant effects are likely
IE000729	Buckroney-Brittis Dunes and Fen SAC	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and Fraxinus excelsior (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Alosa fallax fallax</i> (Twait Shad) [1103] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355] <i>Phoca vitulina</i> (Harbour Seal) [1365] Potential Effect The proposed development site is located 6.1 km from this SAC. There is no direct pathway from the proposed development site to this SAC. There is an indirect hydrological connection to this SAC via foul and surface water drainage. Foul wastewater will be directed to the Arklow Wastewater Treatment Plant (WWTP) which underwent construction and became fully operational in early 2025. Foul wastewater drainage will ultimately be treated along this public network and will not significantly impact on the qualifying interests of this SAC. Surface water drainage from the proposed development will be discharged to the onsite watercourse (Kilmurray Stream) which flows a short distance to the marine environment at Tinahask Lower Bay Beach (approx. 300m). Therefore, there is a weak indirect hydrological pathway to this SAC. However, given the minimum distance from the proposed development site to this European Site (6.1 km), the scale of the proposed development, and the fact that surface water drainage will be directed to an existing public surface water network, any pollutants, dust or silt laden run off that may enter this network will be dispersed, diluted, and ultimately settle within the surface water drainage network, Kilmurray Stream and substantial marine environment at Tinahask Bay. No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. In the absence of mitigation, no significant effects on the qualifying interests of this SAC are likely. No significant effects are likely

IE0000781	Slaney River Valley SAC	OUT	Conservation Objectives The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Qualifying Interests Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Alosa fallax fallax</i> (Twaite Shad) [1103] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355] <i>Phoca vitulina</i> (Harbour Seal) [1365] Potential Impact The proposed development is located 11.8 km from this SAC. There is no direct or indirect pathway from the proposed development site to this SAC. There is an indirect hydrological connection to this SAC via foul and surface water drainage. Foul wastewater will be directed to the Arklow Wastewater Treatment Plant (WWTP) which underwent construction and became fully operational in early 2025. Foul wastewater drainage will ultimately be treated along this public network and will not significantly impact on the qualifying interests of this SAC. Surface water drainage from the proposed development will be discharged to the onsite watercourse (Kilmurray Stream) which flows a short distance to the marine environment at Tinahask Lower Bay Beach (approx. 300m). Therefore, there is a weak indirect hydrological pathway to this SAC. However, given the minimum distance from the proposed development site to this European Site (11.8 km), the scale of the proposed development, and the fact that surface water drainage will be directed to an existing public surface water network, any pollutants, dust or silt laden run off that may enter this network will be dispersed, diluted, and ultimately settle within the surface water drainage network, Kilmurray Stream and substantial marine environment at Tinahask Bay. No potential impact is foreseen. There is no direct pathway from this site to the SAC. The construction and operation of the proposed development will not impact on the conservation interests of the site. In the absence of mitigation, no significant effects on the qualifying interests of this SAC are likely. No significant effects are likely
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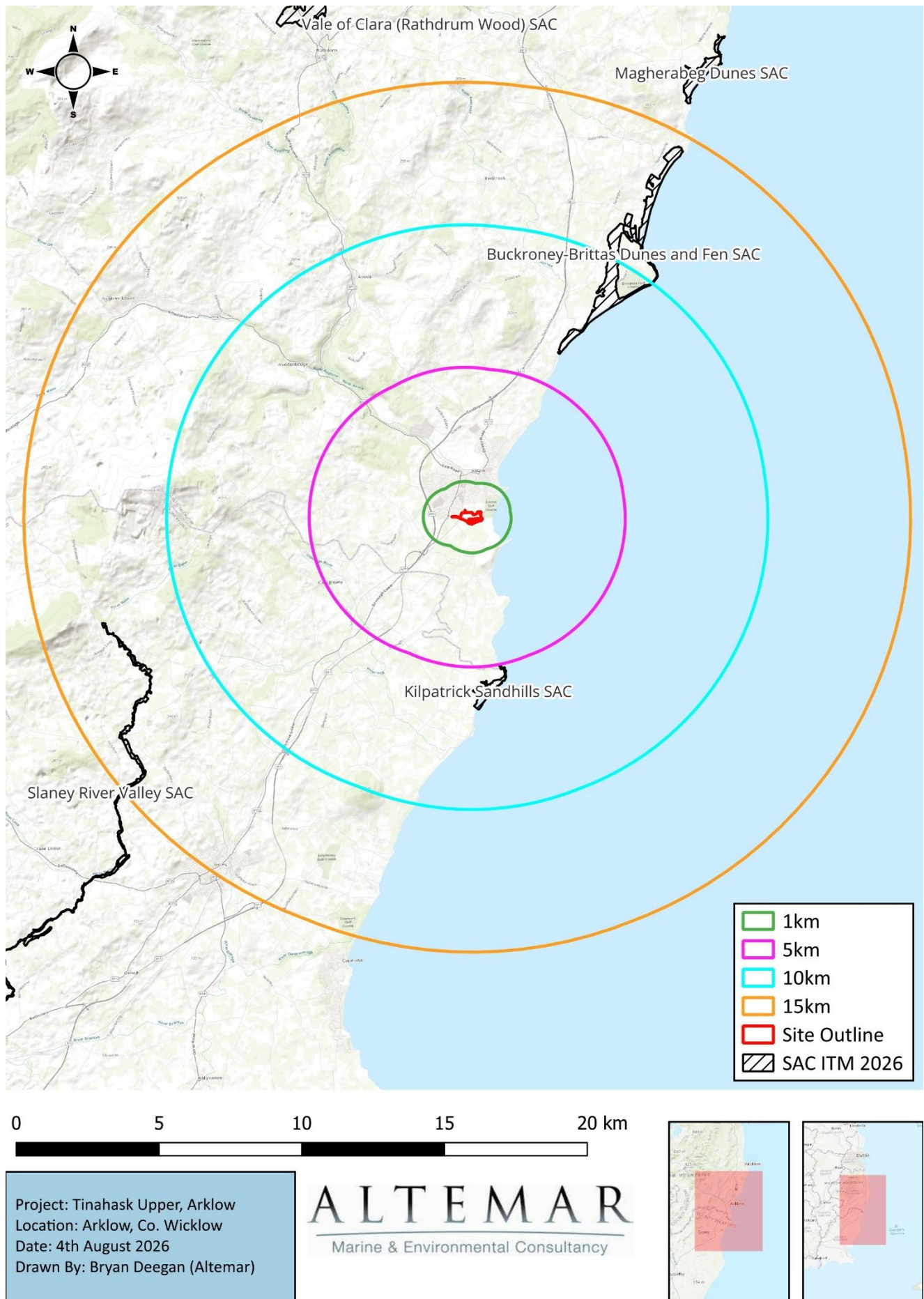


Figure 20. Special Areas of Conservation (SACs) within 15km of the proposed development

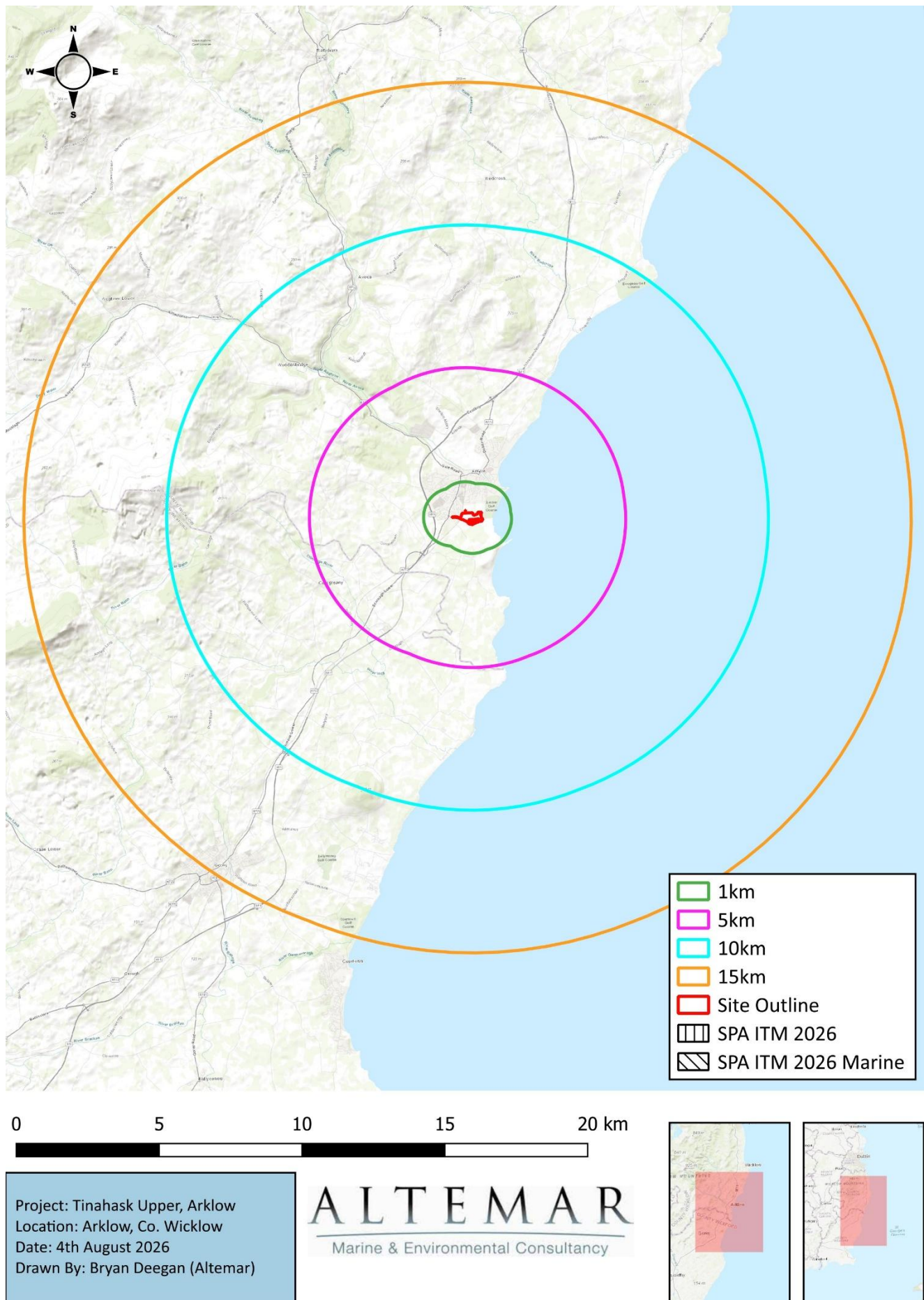


Figure 21. Special Protection Areas (SPAs) within 15km of the proposed development (none)

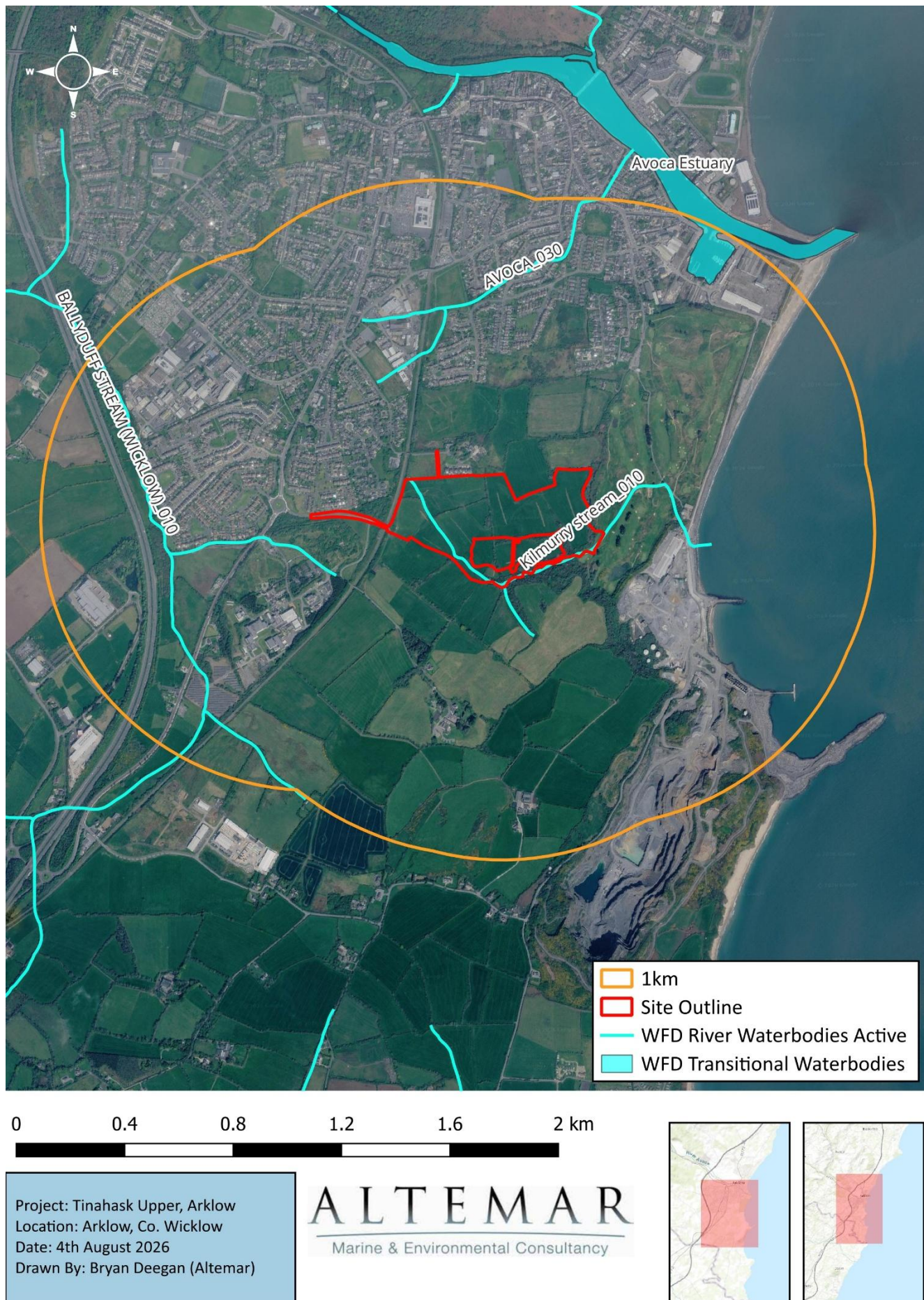


Figure 22. Watercourses within close proximity to the proposed development



Figure 23. Watercourses and potential pathways to SACs within 15 km of the proposed development

4.4 In-Combination Effects

The following is a list of planning application(s) as identified on the Department of Housing, Local Government and Heritage's 'National Planning Application Database' portal (Table 3)²:

Table 3. In-combination effects considered

Ref. No.	Address	Proposal
2560399	Moneylands, Gorey Road, Arklow, Co. Wicklow, Y14 E284	1) construction of a single storey extension to existing office building. 2) construction of a single storey extension to existing production building and 3) all associated and ancillary works, including reconfiguration of existing external steps and footpaths and connections to existing surface water collection network, all at existing facility.
24352	Tinahask, Townland of Tinahask Upper, Arklow	Part 8 - to construct 74 No. Social Housing Units and all associated works. The accommodation shall consist of the following: 2 No. four bedroom storey and a half unit, 17 No. three bedroom two storey units, 45 No. two bedroom two storey units, 2 No. one bedroom apartments in a two storey unit and 8 No. one bedroom single storey units. (Please see the Site Notice for details in relation to submissions or observations in respect to the proposed development).
23485	IDA Business Park, Ballynattin, Arklow	To erect a 532m ² commercial building comprising a 432m ² manufacturing/industrial unit with an ancillary 100m ² office space along with all associated site development works including storage yard, car parking and connect to the existing services.
2360167	Gorey Road, Arklow, Co. Wicklow	Erect 14,500.77 m ² of photovoltaic panels on a ground mounted system with all associated site works at Servier (Ireland) Industries Limited. The development will comprise of a 2.0 MWp Solar PV farm on 3.36 hectares of land located to the south of our existing pharmaceutical manufacturing plant. The electricity generated will be used by Servier (Ireland) Industries Limited. The development will comprise of photovoltaic panels with ground mounted frames together with all ancillary cabling and electrical infrastructure; 1 no. transformer cabin; 1 no. spare parts cabin; using all temporary ways and temporary construction compound / set-down area included on the application.
2362	Site located to the north and northeast of the existing, Kish Business Park, Arklow	Amendments to the information and communication technology (ICT) facility development permitted under Reg. Ref. 20/1088. The proposed amendments comprise the following: Provision of a three-storey Battery Energy Storage System (BESS) building with a gross floor area (GFA) of c.13,787 sq.m, located to the southeast of the permitted ICT Building 3. The proposed building will accommodate battery storage rooms and circulation areas, with photovoltaic panels at roof level, and with an overall height of c.16.8 metres. Associated buildings including a single storey power trunk building (to accommodate a control room and cable rooms, with a GFA of c.539 sq.m and an overall height of c.5.3 metres), a single storey BESS switch room building (to accommodate control rooms and a relay room, with GFA of c.396 sq.m and an overall height of c.5.3 metres) and a transformer compound area to the southwest of the proposed BESS facility. Provision of a fire water storage area and a single storey fire pump house with a GFA of c.39 sq.m to the northeast of the BESS facility. All associated amendments including new amendments to the internal access routes, landscaping and planting, boundary treatments, lighting, and all associated and ancillary works.
22243	Kish Business Park, Clogga Road, Arklow	(i) Single storey industrial unit (Gross Area 2,380sqm) in lieu of that allowed under PPR21/951 and (ii) new car park and timber storage compound and all associated site works.
2560384	IDA Business Park, Ballynattin, Arklow	Erect a 8,875m ² manufacturing & engineering industrial extension with 1,020m ² additional office space to the side of the existing 5,550m ² manufacturing & engineering industrial & office building along with all associated site development works.
221127	Arklow Credit Union Park, Emoclew Road, Arklow	Installation & construction of a new 40m X 25m all weather astro-turf soccer training pitch to include the erection of 4 No. total 10m high floodlight posts in each corner of the pitch together with 3m high fencing & 5m high protective netting to the perimeter of same all connecting into existing services and including all associated site works.
2560350	Site Located northeast of the	Amendments to the Battery Energy Storage System (BESS) permitted on site, under WCC Reg. Ref.: 23/62 (an amendment to WCC Reg. Ref.: 20/1088, which was

² <https://housinggov.ie/maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de>

Ref. No.	Address	Proposal
	existing Kish Business Park, Arklow, Co. Wicklow	subsequently further amended under WCC Reg. Ref.: 24/ 88). The proposed amendments comprise the following: • The provision of a BESS compound with a total area of c. 1.2 ha which will accommodate self-contained batteries and integral fire suppression equipment, climate control equipment and associated electrical components (in place of the previously permitted three-storey BESS structure and adjacent ancillary structures). • A single storey BESS Switchroom located to the south of the BESS facility with a total gross floor area (GFA) of c. 191 sq.m and total height of c. 5.3m accommodating a control room, relay room, and cable basement. • Water Services Plant and Storage equipment located to the north-east of the BESS comprising a single-storey fire pump house with a total GFA of c. 39 sq.m and total height of c. 3.1m, and 2 no. fire hydrant and water storage tanks with a total height of c. 10.3m. • All associated amendments including amendments to internal access routes, landscaping and planting, boundary treatments, the provision of an acoustic barrier to the south of the BESS compound, lighting, and all associated ancillary works. The operation of the development on site will require an EPA Industrial Emissions Directive (IE) Licence.
201088	North & Northeast of Kish Business Park, Arklow, Co. Wicklow	Proposed development, for which a ten-year permission is sought, consists of the following: Demolition of existing outbuildings on the subject site, along with all site clearance and enabling works; Construction of 3 no. part one storey, part two storey, information and communication technology (ICT) facility buildings, each with a gross floor area (GFA) of C. 22,210 sq. m (66,630 sq. m GFA in total), and with a height (to parapet level) of c. 10.4 metres; Each of the 3 no. ICT facility buildings will accommodate ICT equipment rooms, associated electrical and mechanical equipment rooms, loading bays, maintenance and storage space, office administration areas, and staff facilities; Emergency generators (20 no. for each ICT facility building), flue stacks and associated plant are provided in fenced compounds adjacent to each ICT facility; Extension of the existing road serving Kish Business Park to access the subject site, with gated access points to the proposed ICT facility development to be provided off this roadway on its eastern side. The proposed roadway will form part of the inner relief road planned under Objective IT7 of the Arklow Town and Environs LAP 2018-2024; Construction of internal road network and circulation areas, footpaths, provision of 180 no. car parking spaces (60 no. spaces to serve each ICT facility) and 18 no. cycle parking spaces; Landscaping and planting, boundary treatments, lighting, security fencing, gatehouse (with a GFA of 175 sq. m), and all associated site works including underground foul and storm water drainage network, attenuation and percolation areas, and utility cables, on an application site area measuring c. 24.16 hectares. Site located to the North & Northeast of the existing Kish Business Park.
2488	Site located to the north and northeast of the existing Kish Business Park, Arklow, Co. Wicklow	Alterations to the development permitted under Reg. Ref. 20/1088, as amended by Reg. Ref. 23/62, and will supersede the permitted information and communications technology (ICT) facility buildings permitted on site. In summary, the development comprises the replacement of the 3 no. part one and part two storey ICT facility buildings permitted on site, with 5 no. part two and part three storey ICT facility buildings with a reduced building footprint, along with an energy centre compound. The Battery Energy Storage System permitted under Reg. Ref. 23/62 and the substation and transmission line connections permitted under ABP Ref. 315200-22 will be unaffected by the proposed alterations. An Environmental Impact Assessment Report (EIAR) has been prepared and will be submitted to the planning Authority with the planning application. An EPA-Industrial Emissions Directive (IE) licence will be applied for to facilitate the operation of the proposed development.

Based on a review of the planning application viewer there are no developments of significance proposed in proximity of the proposed development. Given this, it is considered that in combination effects with other existing and proposed developments in proximity to the application area would be unlikely, neutral, not significant and localised. It is concluded that no significant effects on Natura 2000 sites will be seen as a result of the proposed development alone or combination with other projects. **No projects in the vicinity of the proposed development would be seen to have a significant in combination effect on Natura 2000 sites.**

5. Conclusions

The proposed development site is located within a suburban agricultural environment. The nearest European site is the Kilpatrick Sandhills SAC (4.9km). The nearest watercourse flows through the western portion of the subject site and continues along the southern boundary and ultimately discharges to the Irish Sea through lands associated with Arklow Golf Club. Foul wastewater will be directed to the Arklow Wastewater Treatment Plant (WWTP) which underwent construction and became fully operational in early 2025. Foul wastewater drainage will ultimately be treated along this public network and will not significantly impact on the qualifying interests of European sites. Surface water drainage from the proposed development will be discharged to the onsite watercourse (Kilmurray Stream) which flows a short distance to the marine environment at Tinahask Lower Bay Beach (approx. 300m). There are two Natura 2000 sites within 10km of this outfall, namely Kilpatrick Sandhills SAC and Buckroney-Brittis Dunes and Fen SAC and thus a weak indirect hydrological pathway exists. However, given the minimum distance from the proposed development site to these European Sites (4.9km and 6.1km respectively), the scale of the proposed development, and the fact that surface water drainage will be directed to an existing public surface water network, any pollutants, dust or silt laden run off will be dispersed, diluted, and ultimately settle within the surface water drainage network, Kilmurray Stream and substantial marine environment at Tinahask Bay. In the absence of mitigation, no significant effects on European sites are likely. No specific mitigation is required to prevent impacts on Natura 2000 sites.

Moreover, given the minimum distance from the proposed development site any pollutants, silt laden run off or dust that enters the surface or foul water network, would be treated, diluted or dispersed to negligible levels, prior to reaching any European sites.

Having taken into consideration foul and surface water drainage from the proposed development, the distance between the proposed development to designated conservation sites, lack of direct hydrological pathway or biodiversity corridor link to conservation sites, and the dilution effect with other effluent and surface runoff, it is concluded that the proposed development would not give rise to any significant effects to designated sites. The construction and operation of the proposed development will not impact on the conservation objectives of qualifying interests of European sites.

This report presents a Stage 1 Appropriate Assessment Screening for the Proposed Development, outlining the information required for the competent authority to screen for appropriate assessment and to determine whether or not the Proposed Development, either alone or in combination with other plans and projects, in view of best scientific knowledge, is likely to have a significant effect on any European or European site.

Based on the content of this report, the competent authority is enabled to conduct a Stage 1 Screening for Appropriate Assessment and consider whether, in view of best scientific knowledge and in view of the conservation objectives of the relevant European sites, the Proposed Development, individually or in combination with other plans or projects is likely to have a significant effect on any European site.

6. Data Used for AA Screening

NPWS site synopses and conservation objectives of sites within 15km were assessed. The most recent SAC and SPA boundary shapefiles were downloaded and overlaid on ESRI road maps and satellite imagery.

7. Findings of No Significant Effects Report

Details of Project	Appropriate Assessment Screening for Amendments to the Large-scale Residential Development permitted under WCC Reg. Ref. 24/325 at Tinahask Upper, Money Big, Money Little, Arklow, Co. Wicklow.
Name and Location of NATURA 2000 Sites Within 15km	Buckroney Brittas Dunes and Fen SAC Kilpatrick Sandhills SAC Slaney River Valley SAC
Project Description	Residential Development
Is the Project directly connected with the management of the NATURA 2000 site?	No
Details of any other projects or plans that together with this project could affect the NATURA 2000 site	None
The assessment of significant effects	
Describe how the project is likely to affect the NATURA 2000 site	No significant effect predicted
Response to consultation	N/A
Data collected to carry out the assessment	Supporting NPWS data.
Who carried out the assessment	Altamar Ltd.
Sources of data	NPWS website, standard data form, conservation objectives data of the site and references outlined in the AA Screening Report.
Explain why the effects are not considered significant	Having taken into consideration the distance to the nearest Natura 2000 site, the lack of direct hydrological pathway or biodiversity corridor link to conservation sites and the proposed foul and surface water drainage strategy, it is concluded that this development would not give rise to any significant effects on designated sites.
Level of assessment completed	Stage 1 Screening
Overall conclusions	On the basis of the content of this report, the competent authority is enabled to conduct a Stage 1 Screening for Appropriate Assessment and consider whether, in view of best scientific knowledge and in view of the conservation objectives of the relevant European sites, the Proposed Development, individually or in combination with other plans or projects is likely to have a significant effect on any European site.

8. References

1. Department of Environment Heritage and Local Government Circular NPW 1/10 and PSSP 2/10 on Appropriate Assessment under Article 6 of the Habitats Directive – Guidance for Planning Authorities March 2010.
2. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government 2009; www.npws.ie/publications/archive/NPWS_2009_AA_Guidance.pdf
3. Managing NATURA 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC, European Commission 2000; ec.europa.eu/environment/nature/Natura2000/management/docs/art6/provision_of_art6_en.pdf
4. Assessment of Plans and Projects Significantly Affecting NATURA 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC; ec.europa.eu/environment/nature/Natura2000management/docs/art6/Natura_2000_assess_en.pdf
5. Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission; ec.europa.eu/environment/nature/Natura2000/management/docs/art6/guidance_art6_4_en.pdf
6. Guidance document on the implementation of the birds and habitats directive in estuaries and coastal zones with particular attention to port development and dredging; ec.europa.eu/environment/nature/Natura2000/management/docs/guidance_doc.pdf
7. The Status of EU Protected Habitats and Species in Ireland. www.npws.ie/publications/euconservationstatus/NPWS_2007_Conservation_Status_Report.pdf
8. NPWS (2017) Conservation Objectives: Buckroney Brittas Dunes and Fen SAC 000729. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
9. NPWS (2017) Conservation Objectives: Kilpatrick Sandhills SAC 001742. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
10. NPWS (2011) Conservation Objectives: Slaney River Valley SAC 000781. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
11. NPWS (2017) Conservation objectives for Magherabeg Dunes SAC [001766]. Generic Version 8.0. Department of Housing, Local Government and Heritage.

Appendix I Wintering Bird Assessment 2022/2023

Tinahask Lower Arklow (APP2) Winter Bird Surveys 2022-2023

Introduction

Between November 2022 and March 2023 9 winter bird surveys were undertaken at lands at Tinahask Lower, Arklow, Co Wicklow by Hugh Delaney, a freelance Ecologist (Birds primarily) having completed work on numerous sites with ecological consultancies over 10+ years. Hugh is local to the Dun Laoghaire-Rathdown area in Dublin and is especially familiar with the bird life and its ecology in the environs going back over 30 years.

Winter Bird Survey Methodology

Winter bird surveys are conducted from soon after sunrise until late in the afternoon, or alternatively started later in the day until sunset, the site is monitored throughout the survey period and all bird species utilizing the site recorded, including species flying through overhead.

Checks are also made on suitable habitat nearby or adjacent to the site for comparative purposes and to monitor any interchange of birds between sites. Target species (species of more special interest) utilizing the site are mapped and estimates of the time these species frequented the site recorded.

Site Location



Fig. Tinahask Lower, Arklow (APP2) outlined in red.

Site Description

Series of fields of grassland pasture, maintained for cattle grazing and silage production, bordered across much of the site by hedgerows, more extensive areas of hedgerow in central part and bordering the east side of the site. Single small pond situated in the field at the southeast corner of the site (visible as an islet in the image above).

Specific site survey methodology

Entire site traversed from north to south during surveys traversing field to field clockwise or anti-clockwise around site depending on light conditions, site traversed twice in course of surveys, vantage point observations challenging due to the undulating terrain of site, but short V.P. observations were made from the south end of site looking north from area marked Money Big on Fig. 1, which afforded an expansive view north and east over site.

November 24th, 2022

Sunrise- 08.05hrs/Sunset 16.17hrs. Weather – Wind F2 West, Cloud 4/8, Dry, 8c, Excellent visibility. On-site 08.15hrs – 14.15hrs.

Species recorded – Red Kite, Snipe, Black-headed Gull, Herring Gull, Woodpigeon, Skylark, Meadow Pipit, Pied Wagtail, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Raven, Starling, House Sparrow, Chaffinch, Linnet, Goldfinch, Bullfinch.

10.00hrs-12.00hrs – Site traversed from northwest to southeast and back north on east side, Snipe (<1 flushed from field adjacent to main entrance to site). Red Kite (<1 passed south over middle of site at 11.20hrs). Herring Gull (<10) and Black-headed Gull (<12) noted passing over the site only mainly moving from south to northwest. Meadow Pipit (<10 noted foraging in fields along the north side of the site at 10.30hrs). Passerines present in the hedgerows included Chaffinch (<4 at east side of site), Goldfinch (<20 around site), Linnet (<5 at the east side), Bullfinch (<1 in middle of site), Goldcrest (<3), House Sparrow (<8 north boundary of site adjacent houses).

12.00hrs-14.15hrs – Snipe (<2 flushed from the southeast corner of site). Herring Gull (<4) and Black-headed Gull (<6) noted foraging at the northwest corner of site at 13.45hrs, small numbers of both Less than 10 each noted passing over site also. Mistle Thrush (<3) and Redwing (<15) noted foraging in fields at south end of site at 12.10hrs. Passerines present in hedgerow habitat around site including Goldcrest (<2 in Pine stand at south end of site), Goldfinch (<18), Greenfinch (<4), Chaffinch (<10), Woodpigeon (<20), Skylark (<3 noted passing west over the site during the day), Linnet (<12), Starling (<30), Great Tit (<2), Long-tailed Tit (<13). Meadow Pipit (<20) noted foraging in fields around the site. Raven (<2) noted in trees at the south boundary of site at 11.40hrs.

4 Hares noted during the day, 2 at the south end and 2 at the northwest part of site.

December 5th, 2022

Sunrise- 08.22hrs/Sunset 16.08hrs. Weather – Wind F3 East, Cloud 6/8, Light scattered showers, 7c, Excellent visibility. On-site 10.00hrs – 16.00hrs.

Species recorded – Buzzard, Snipe, Black-headed Gull, Common Gull, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Fieldfare, Blackbird, Goldcrest, Wren, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Raven, Starling, House Sparrow, Chaffinch, Linnet, Goldfinch, Bullfinch, Reed Bunting, Yellowhammer.

10.00hrs-12.00hrs – Site traversed from northwest to southeast and back north on east side, Snipe (<2) flushed from fields at northwest side of site (field north of main entrance). Snipe (<3 flushed from field adjacent to main entrance to site). Buzzard (<2 foraging in fields at the north end of the site). Redwing (>25), Song Thrush (<2), Blackbird (<5) and Reed Bunting (<1) noted foraging in fields at the north end of the site. Herring Gull (<15), Black-headed Gull (<6) and Common Gull (<3) noted passing over the site only. Passerines present in the hedgerows included Yellowhammer (<2 at north side of site), Chaffinch (<6 at west side of site), Bullfinch (<2 at east side of site), Goldcrest (<4 at stand of Pines at south side of site), House Sparrow (<5 north boundary of site adjacent houses).

12.00hrs-16.00hrs – Snipe (<2) flushed from fields in center of site and (1) at the south side of site. Buzzard (<1) noted soaring over the west side of the site at 14.25hrs. Black-headed Gull (<8) noted foraging at south side of site at 13.45hrs. Redwing (<40), Fieldfare (<20) and Song Thrush (<5) noted foraging in fields at south side of site adjacent Moneylands farm at 12.30hrs. Passerines present in hedgerow habitat around site including Goldcrest (<2 in center of site), Goldfinch (<10), Chaffinch (<8), Woodpigeon (<25), Linnet (<5), Starling (<80), Coal Tit (<2), Long-tailed Tit (<4). Raven (<1) observed foraging at the east side of site at 14.10.

3 Hares noted during the day, 2 at the south end and 1 in the northeast corner of site.

December 28th, 2022

Sunrise- 08.40hrs/Sunset 16.12hrs. Weather – Wind F2 Southeast, Cloud 7/8, Light showers, 6c, Excellent visibility. On-site 08.30hrs – 12.00hrs.

Species recorded – Mallard, Buzzard, Snipe, Black-headed Gull, Common Gull, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Fieldfare, Blackbird, Goldcrest, Wren, Blue Tit, Long-tailed Tit, Magpie, Jackdaw,

Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Goldfinch, Bullfinch, Yellowhammer.

08.30hrs-12.00hrs – Site traversed from northwest to southeast and back north on east side, Snipe (<2) flushed from fields at northwest side of site (field north of main entrance). Fieldfare (<20), Redwing (>35), Song Thrush (<5) and Blackbird (<10) noted foraging in fields bordering the north end of the site. Herring Gull (<12) and Common Gull (<6) foraging in the northeast corner field of the site. A pair of Mallard were flooded from a flooded ditch in the center of the site and flew north. Herring Gull (<22) and Black-headed Gull (<10) noted mainly passing over the site.

Passerines present in the hedgerows included Yellowhammer (<1 at east side of site), Greenfinch (<3 north end of site), Bullfinch (<2 at southeast corner of site), Goldcrest (<2 at center of site).

12.00hrs-14.30hrs – Snipe (<4) flushed from fields in center of site and an additional 2 flushed from fields at the north side of the site. Buzzard (<2) noted soaring over the west side of the site at 13.05hrs. Black-headed Gull (<6) and Common Gull (<4) noted foraging in fields at the south end of site at 13.00hrs. Redwing (<40), Fieldfare (<20), Song Thrush (<5) and Meadow Pipit (<15) noted foraging in fields at south side of site adjacent Moneylands farm at 12.30hrs. Passerines present in hedgerow habitat around site including Goldcrest (<4), Goldfinch (<20), Chaffinch (<10), Woodpigeon (<15), Linnet (<8), Starling (<100), Blue Tit (<5), Long-tailed Tit (<4).

2 Hares noted during the day in fields at the northeast side of the site (foraging and resting).
Single Foxes noted in southeast and center of site.

January 19th, 2023

Sunrise- 08.29hrs/Sunset 16.43hrs. Weather – Wind F2 West, Cloud 3/8, Dry, 5c, Excellent visibility. On-site 10.30hrs – 16.30hrs.

Species recorded – Red Kite, Snipe, Black-headed Gull, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Fieldfare, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Goldfinch, Bullfinch, Reed Bunting, Yellowhammer.

10.30hrs-12.00hrs – Site traversed from northwest to southeast and back north on east side, Snipe (<7) flushed from fields at northwest side of site (near main entrance), large numbers of thrushes foraging in fields at the southeast corner of the site (Redwing – 120, Fieldfare -25, Song Thrush – 20) also Meadow Pipit (<10) foraging in same area. Small numbers of Herring Gull (<20) and Black-headed Gull (<15) noted mainly passing over the site. Passerines present in the hedgerows included Yellowhammer (<2 at east side of site), Reed Bunting (<4 at east side of site), Goldcrest (<3 at south side of site).

12.00hrs-16.30hrs – Redwing (<50) foraging in center of site, Snipe (<3) flushed from fields in center of site and an additional 6 flushed from fields at the north side of the site. Red Kite (<1) noted soaring over the southeast corner of the site at 12.36hrs. Redwing (<60), Blackbird (<6) and Song Thrush (<5) noted foraging in fields at north side of site at 14.20hrs. Passerines present in hedgerow habitat around site including Dunnock (<10), Goldfinch (<25), Bullfinch (<4), Woodpigeon (<40), Linnet (<15), Goldcrest (<5) Starling (<50), Long-tailed Tit (<8).

5 Hares noted during the day in fields around the site (foraging and resting).

January 29th, 2023

Sunrise- 08.14hrs/Sunset 17.01hrs. Weather – Wind F4 West, Cloud 4/8, Dry, 7c, Excellent visibility. On-site 08.30hrs – 14.30hrs.

Species recorded – Red Kite, Buzzard, Snipe, Black-headed Gull, Herring Gull, Common Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Fieldfare, Blackbird, Goldcrest, Wren, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Goldfinch, Siskin, Bullfinch, Reed Bunting, Yellowhammer.

08.30hrs-12.00hrs – Site traversed from north to east and then south around to west side, Snipe (<3) flushed from fields at northwest side of site (near main entrance). Redwing (<25), Fieldfare (<15) and Song Thrush (<5) noted foraging in fields along north side of the site. Buzzard (<2) flushed from field at the northeast corner of site at 11.15hrs. Small numbers of Herring Gull (<10), Common Gull (<4) and Black-headed Gull (<20) noted mainly passing over the site. Passerines present in the hedgerows included Yellowhammer (<4 at northeast side of site), Reed Bunting (<2 at east side of site), Bullfinch (<4 in middle of site), Linnet (<8 at east side of site), Siskin (<3 in middle of site), Mistle Thrush (<3 at east side of site).

12.00hrs-14.30hrs – Red Kite (<2) noted soaring in middle of site at 13.45hrs, the birds drifting off south. Redwing (<40), Fieldfare (<12), Blackbird (<10) and Song Thrush (<8) noted foraging in fields bordering the south side of the site at 13.30hrs. Passerines present in hedgerow habitat around site including Yellowhammer (<3 at south side of site), Reed Bunting (<2 at south side of site), Goldfinch (<15), Dunnock (<6), Chaffinch (<15), Bullfinch (<2), Woodpigeon (<50), Linnet (<25), Goldcrest (<6) Starling (<100), Blue Tit (<5), Long-tailed Tit (<10), Meadow Pipit (<15 mainly foraging in fields at south side of site). Snipe (<3) flushed from middle of site at 14.10hrs. Herring Gull (<4) and Common Gull (<1) noted foraging in field at southeast corner of site during afternoon. Buzzard (<2) noted soaring over north end of site at 14.20hrs.

3 Hares and 1 Fox noted around site during survey.

February 8th, 2023

Sunrise-07.57hrs/Sunset 17.21hrs. Weather – Wind F2 Southwest, Cloud 6/8, Dry, 6c, Excellent visibility. On-site 10.30hrs – 17.00hrs.

Species recorded – Pheasant, Sparrowhawk, Buzzard, Snipe, Black-headed Gull, Herring Gull, Common Gull, Woodpigeon, Feral Pigeon, Meadow Pipit, Pied Wagtail, Grey Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Goldfinch, Reed Bunting, Yellowhammer.

10.30hrs-12.00hrs – Site traversed from north to east and then south around to west side, Snipe (<2) flushed from field at northwest corner of site. Redwing (<10), Yellowhammer (<2), Song Thrush (<6), Mistle Thrush (<2), Meadow Pipit (<5) and Starling (<40) noted foraging in fields along north end of site. Sparrowhawk (<1) observed hunting at 11.50hrs at northeast corner of site. Small numbers of Herring Gull (<12), Common Gull (<8) and Black-headed Gull (<15) noted passing north over site, not observed to forage on-site. Passerines present in the hedgerows included Reed Bunting (<3 at north side of site), Chaffinch (<10 in middle of site), Linnet (<12 at east side of site), House Sparrow (<5 at north end of site), Goldcrest (<3 in middle of site), Pied Wagtail (<2), Grey Wagtail (<1 over site), Wren (<7), Robin (<5).

12.00hrs-17.00hrs – Snipe (<5) were flushed from middle and southeast corner of site during afternoon. Redwing (<45), Fieldfare (<10), Blackbird (<5), Song Thrush (<10) and Meadow Pipit (<14) were noted foraging in fields bordering the south side of the site during afternoon.

Passerines present in hedgerow habitat around site including Yellowhammer (<2 at the southwest corner of site), Chaffinch (<20 in middle and southeast corner of site), Bullfinch (<4), Goldfinch (<30 foraging mainly in center of site) Rook (<25), Woodpigeon (<40), Linnet (<15), Goldcrest (<5), Blue Tit (<6), Long-tailed Tit (<6) and Great Tit (<2). Buzzard (<2) noted soaring over middle of site at 13.35hrs and a single soaring over northwest corner of site at 15.15hrs. Pheasant flushed from middle of site at 15.05hrs. Black-headed Gull (<8) noted foraging in fields intermittently during afternoon, with small numbers of Herring Gull (<10) and Common Gull (<5) noted passing north.

2 Hares noted at north end of site during survey, a Fox also observed at the south end.

February 19th, 2023

Sunrise- 07.35hrs/Sunset 17.43hrs. Weather – Wind F1 Southwest, Cloud 5/8, Dry, 8c, Excellent visibility. On-site 08.00hrs – 14.00hrs.

Species recorded – Red Kite, Buzzard, Sparrowhawk, Snipe, Black-headed Gull, Herring Gull, Common Gull, Feral Pigeon, Woodpigeon, Meadow Pipit, Pied Wagtail, Blackcap, Dunnock, Robin, Song Thrush, Redwing, Fieldfare, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Goldfinch, Reed Bunting, Yellowhammer.

08.00hrs-12.00hrs – Site traversed from north to south and then around to west side and back north, Snipe (<5) flushed from field at northwest corner of site and field adjacent the main entrance. Yellowhammer (<3), Mistle Thrush (<2), Meadow Pipit (<10), Chaffinch (<8), Goldfinch (<20), Linnet (<15) and Reed Bunting (<2) noted foraging in fields along west side of site. Small numbers of Herring Gull (<15), Common Gull (<2) and Black-headed Gull (<25) noted passing over site, not observed to forage on-site. Buzzard (<2) noted soaring over the south side of the site at 10.15hrs. Redwing (<15), Fieldfare (<5), Song Thrush (<10), Starling (<35) and Meadow Pipit (<12) noted foraging along fields at the south end of the site. Two Snipe flushed from the southeast field at 11.05hrs. Blackcap (<1), Goldcrest (<2), Bullfinch (<2), Coal Tit (<1), Blue Tit (<4), Wren (<3), Robin (<5) and Pied Wagtail (<2) noted along east and center of site.

12.00hrs-14.00hrs – A Sparrowhawk (<1) was noted hunting at the north end of site at 13.15hrs. Snipe (<2) were flushed from field at the northeast of site at 12.45hrs. Red Kite (<1) drifted southeast over site from north at 13.40hrs. Redwing (<30) and Song Thrush (<5) noted foraging at fields bordering north end of site intermittently during afternoon. Other passerines recorded were Yellowhammer (<2 at northeast field), Reed Bunting (<1 at north end), Meadow Pipit (<6) and Pied Wagtail (<2) also at the north end. Herring, Black-headed and Common Gull noted passing over site mainly west and north in small numbers (<10).

3 Hares were noted around site during survey.

March 3rd, 2023

Sunrise- 07.08hrs/Sunset 18.06hrs. Weather – Wind F2 Northeast, Cloud 6/8, Dry, 7c, Excellent visibility. On-site 11.30hrs – 17.30hrs.

Species recorded – Buzzard, Snipe, Black-headed Gull, Herring Gull, Lesser black-backed Gull, Common Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Stonechat, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Raven, Starling, Chaffinch, Greenfinch, Linnet, Goldfinch, Reed Bunting, Yellowhammer.

11.30hrs-17.30hrs – Site traversed from west to east at the north side and then around to south side and back north, Snipe (<2) singles flushed from field at northwest corner of site and at northeast corner of site. Yellowhammer (<2), Mistle Thrush (<4), Meadow Pipit (<8), Chaffinch (<6), Goldfinch (<25), Greenfinch (<2), Linnet (<10) and Reed Bunting (<1) noted foraging in fields along north side of site. Buzzard (<2) soaring over center of site at 12.40hrs. Small numbers of Herring Gull (<10), Lesser black-backed Gull (<3), Common Gull (<6) and Black-headed Gull (<20) noted passing over site mainly moving north, not observed to forage on-site. Redwing (<14), Song Thrush (<7), Starling (<100) and Meadow Pipit (<5) noted foraging along fields at the south end of the site. Snipe (<2) flushed from the southeast field at 13.50hrs. Goldcrest (<3), Stonechat (<1), Blue Tit (<4), Great Tit (<3), Long-tailed Tit (<8), Wren (<2), Robin (<3) and Pied Wagtail (<2) noted along east and center of site. Raven (<2) passed south over middle of site at 15.15hrs.

1 Hare and 1 Fox were noted around site during survey.

March 25th, 2023

Sunrise- 06.16hrs/Sunset 18.46hrs. Weather – Wind F3 West, Cloud 7/8, Dry, 6c, Excellent visibility. On-site 07.30hrs – 13.30hrs.

Species recorded – Red Kite, Buzzard, Peregrine, Snipe, Black-headed Gull, Herring Gull, Lesser black-backed Gull, Common Gull, Woodpigeon, Skylark, Meadow Pipit, Pied Wagtail, Grey

Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Blackbird, Chiffchaff, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, Chaffinch, Greenfinch, Linnet, Goldfinch, Yellowhammer.

07.30hrs-13.30hrs – Site traversed from northwest to southwest and then around to east side and back north, Snipe (<1) single flushed from field at northwest corner of site. Yellowhammer (<3), Meadow Pipit (<20 including birds moving north on migration), Chaffinch (<5), Goldfinch (<10), Greenfinch (<1), Bullfinch (<2), Redpoll (<2), Linnet (<5) noted foraging in fields along west side of site. Small numbers of Herring Gull (<12), Lesser black-backed Gull (<11), Common Gull (<8) and Black-headed Gull (<25) noted passing over site mainly moving north, not observed to forage on-site. Redwing (<2), Mistle Thrush (<5), Song Thrush (3), Starling (<30) and Meadow Pipit (15) noted foraging along fields at the south end of the site. Red Kite (<1) observed soaring over east side of site at 11.15hrs and 12.35hrs. A Peregrine Falcon (<1) was observed passing over the northeast corner of the site going north at 11.56hrs. Blue Tit (<8), Great Tit (<2), Long-tailed Tit (<10), Wren (5), Robin (<3), Pied Wagtail (<2) and Grey Wagtail (<1) and Chiffchaff (<2) were noted along east and center of site. Skylark (<6 noted passing west over site during day, not noted to forage on-site). Robin and Blackbird (One pair each, were observed nest building in center of site).

4 Hare were noted around site during survey.

Comments and observations on survey results

In total 47 species were recorded over 9 surveys at the Tinahask Lower site, Arklow during the winter bird surveys in 2022-2023, two species red-listed as species listed as of conservation concern (per Birdwatch Ireland's species of conservation concern 2020-2026) were wintering **Snipe** and **Redwing**. Snipe were recorded around the site on all surveys, favoring the fields adjacent the main entrance and also in the southeast area of the site, numbers varied between 2 birds recorded on dates in November and March, 6-7 on other dates, and peak counts of 10 birds recorded on January 19th and 9 recorded on February 19th, areas of fields around the site appeared to be consistently wet throughout the winter and the birds appeared to be availing of this as a feeding opportunity. Redwing were also recorded on all surveys with numbers averaging between 40-60 birds with a peak count of 180 noted on January 19th. Wintering amber-listed species recorded included Herring Gull, Black-headed Gull, and Common Gull, these were recorded foraging on-site in small numbers only (almost all in single figures for each species). Red Kite was observed passing over the site on several dates, but not recorded foraging on-site, Buzzard was observed foraging on-site occasionally. Passerine species recorded were consistent throughout the surveys with the well-established hedgerow habitat affording a good range of species.

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

Appendix II. Wintering Bird Assessment 2023/2024

Tinahask Lower Arklow (APP2) Winter Bird Surveys 2023-2024

Introduction

Between November 2023 and March 2024 9 winter bird surveys were undertaken at lands at Tinahask Lower, Arklow, Co Wicklow by Hugh Delaney, a freelance Ecologist (Birds primarily) having completed work on numerous sites with ecological consultancies over 10+ years. Hugh is local to the Dun Laoghaire-Rathdown area in Dublin and is especially familiar with the bird life and its ecology in the environs going back over 30 years.

Winter Bird Survey Methodology

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

Site Location



Fig.1 Tinahask Lower, Arklow (APP2) outlined in red.

Site Description

Series of fields of grassland pasture, maintained for cattle grazing and silage production, bordered across much of the site by hedgerows, more extensive areas of hedgerow in central part and bordering the east side of the site. Single small pond situated in the field at the southeast corner of the site (visible as an islet in the image above).

Specific site survey methodology

Entire site traversed from north to south during surveys traversing field to field clockwise or anti-clockwise around site depending on light conditions, site traversed twice in course of surveys, vantage point observations challenging due to the undulating terrain of site, but short V.P.

observations were made from the south end of site looking north from area marked Money Big on Fig. 1, which afforded an expansive view north and east over site.

November 21st, 2023

Sunrise- 08.00hrs/Sunset 16.20hrs. Weather – Wind F2 West, Cloud 5/8, Dry, 4c, Excellent visibility.
On-site 09.30hrs – 15.30hrs.

Species recorded –Red Kite, Buzzard, Snipe, Black-headed Gull, Herring Gull, Woodpigeon, Feral Pigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Song Thrush, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Redpoll, Goldfinch, Bullfinch.

10.00hrs-12.00hrs – Site traversed from northwest corner to southwest corner to southeast and back north on east side. Snipe (<2) flushed from fields at northwest side of site (near main entrance). At the north and west side of the site, Song Thrush (<3), Blackbird (<4), Goldfinch (<5), Redpoll (<1), Goldcrest (<2), Robin (<5), Dunnock (<3), Wren (<5), Pied Wagtail (<1), Meadow Pipit (<5), Blue Tit (<4), Long-tailed Tit (<6), Great Tit (<2) were observed foraging in the hedgerow and fields. Small numbers of Herring Gull (<10) were noted passing over the site, none observed foraging on-site. Red Kite (<1) was noted soaring over the center of site at 10.42hrs, then drifting south off-site. At the south end of the site Meadow Pipit (<10), Skylark (<4), Goldfinch (<20) and Linnet (<12) were noted foraging in fields there.

12.00hrs-16.00hrs – A Snipe was flushed from the center of the site at 13.55hrs. Buzzard (<1) passed northwest over site at 13.10hrs and one was flushed from the northwest corner of the site at 15.25hrs. At the east side of the site Blackbird (<3), Song Thrush (<2), Blue Tit (<4), Long-tailed Tit (>9), Bullfinch (<1), Chaffinch (<8), Goldfinch (<6), Bullfinch (<1), Redpoll (<2), Goldcrest (<3), Wren (<5), Robin (<3) and Dunnock (<5) were noted foraging, mostly in the center area associated with the large hedgerow 'ravine' in this area. Meadow Pipit (<6) and Mistle Thrush (<2) were noted foraging in the northeast field at 14.10hrs.

December 5th, 2023

Sunrise- 08.22hrs/Sunset 16.08hrs. Weather – Wind F2 Northwest, Cloud 4/8, Dry, 3c, Excellent visibility. On-site 09.30hrs – 15.30hrs.

Species recorded –Cormorant, Red Kite, Snipe, Black-headed Gull, Herring Gull, Woodpigeon, Feral Pigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Song Thrush, Redwing, Fieldfare, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Raven, Starling, House Sparrow, Chaffinch, Linnet, Redpoll, Goldfinch, Bullfinch, Reed Bunting.

09.30hrs-12.00hrs – Site traversed from northwest corner to southwest corner to southeast and back north on east side. Snipe (<6) flushed from fields at northwest side of site (near main entrance and east from here) and 3 more from fields along the west side of site. At the northwest end of the site Redwing (<10), Fieldfare (<5) and Song Thrush (<3) were observed foraging in fields. Small numbers of Herring Gull (<10) and Black-headed Gull (<6) were noted passing over the site, none observed foraging on-site. Red Kite (<2) were noted soaring over the southeast corner of the site at 11.15hrs. Passerines present in the hedgerows along the north and west sides of the site included Chaffinch (<4), Goldfinch (<8), Bullfinch (<1), Linnet (<7), Redpoll (<2), Blue Tit (<3), Great Tit (<2), Long-tailed Tit (>5), Robin (<2), Wren (<3), Dunnock (<5).

12.00hrs-15.30hrs – Snipe (<4) were flushed from the southeast corner of the site at 12.45hrs. Meadow Pipit (<6), Pied Wagtail (<1), Linnet (<15), Goldfinch (<10), Reed Bunting (<1) and Skylark (<3) were noted foraging in fields at the southeast end of the site. Buzzard (<2) noted perched and foraging on ground in center of site intermittently from 13.30hrs. A Cormorant flew northwest over the site at 14.05hrs. Raven (<3) flew south over the site at 13.20hrs. At the east and middle part of the site Goldcrest (<3), Robin (<5), Blue Tit (<3), Long-tailed Tit (<10), Wren (<5), Dunnock (<4), Blackbird (<6), Song Thrush (<2) were observed foraging.

December 19th, 2023

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

Species recorded – Buzzard, Snipe, Woodcock, Black-headed Gull, Common Gull, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Stonechat, Song Thrush, Fieldfare, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Redpoll, Goldfinch, Greenfinch, Bullfinch, Reed Bunting, Yellowhammer, Skylark.

09.30hrs-12.00hrs – Site traversed from northwest to northeast to southeast and back north on west side. Snipe (<3) flushed from fields at northwest side of site (near main entrance and east from here) and 6 more from fields in the center and south side of site. At the north end of the site Redwing (<75), Fieldfare (<10), Song Thrush (<10) and Mistle Thrush (<1) were observed foraging in fields. Black-headed Gull (<4) noted foraging in the northwest corner of the site. Small numbers of Herring Gull (<20) and Black-headed Gull (<10) and Common Gull (<10) noted passing over the site, not observed foraging on-site except the aforementioned Black-headed. Passerines present in the hedgerows along the north and east sides of the site included Chaffinch (<6), House Sparrow (<5), Goldfinch (<8), Blue Tit (<3), Great Tit (<1), Long-tailed Tit (>8), Robin (<4), Starling (<15), Wren (<5), Dunnock (<5) all foraging at the east side of the site. A Woodcock (<1) was flushed from the middle part of site adjacent south side of the large hedgerow at 10.45hrs.

12.00hrs-15.30hrs – Snipe (<2) were flushed from the southwest corner of the site at 13.00hrs were likely birds not already recorded. Meadow Pipit (<10), Pied Wagtail (<2), Mistle Thrush (<2), Fieldfare (<4) and Skylark (<1) were noted foraging in fields at the south end of the site. Buzzard (<1) noted foraging in fields along the west side of site at 13.30hrs. Stonechat (<2), Song Thrush (<3), Blackbird (<5), Wren (<3), Robin (<4), Yellowhammer (<2), Reed Bunting (<1), Chaffinch (<5), Goldfinch (<13), Greenfinch (<2), Linnet (<4), Goldcrest (<2) noted along the west side of the site.

January 10th, 2024

Sunrise- 08.36hrs/Sunset 16.29hrs. Weather – Wind F3 East, Cloud 7/8, Dry, 4c, Excellent visibility.
On-site 09.00hrs – 15.00hrs.

Species recorded – Buzzard, Snipe, Pheasant, Black-headed Gull, Common Gull, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Song Thrush, Fieldfare, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Redpoll, Goldfinch, Greenfinch, Bullfinch, Reed Bunting, Yellowhammer.

09.00hrs-12.00hrs – Site traversed from northwest to northeast to southeast and back north on west side. Snipe (<8) flushed from fields at northwest side of site (near main entrance and east from here) and 5 more from fields in the south side of site. At the north end of the site Redwing (<45), Fieldfare (<20), Song Thrush (<14), Blackbird (<5) and Mistle Thrush (<2) were observed foraging in fields. Small numbers of Herring Gull (<15) and Black-headed Gull (<10) and Common Gull (<2) noted passing over the site. Black-headed Gull (<5) and Common Gull (<3) were observed foraging in the northeast corner of the site at 10.00hrs. Passerines present in the hedgerows along the north and east sides of the site included Reed Bunting (<1 at the north side), Goldcrest (<3 at east side of site in large hedgerow ravine), Chaffinch (<4), Starling (<40 foraging at the north fields), Greenfinch (<1), Goldfinch (<15), Blue Tit (<2), Long-tailed Tit (>4), Robin (<5), Wren (<3), Dunnock (<4) all foraging at the east side of the site.

12.00hrs-15.00hrs – Buzzard (<2) noted in trees at the southeast end of the site at 13.15hrs and probably same birds soaring over the center of the site at 14.45hrs. Pheasant (<2 at north end of site). Redwing (<100), Fieldfare (<18), Blackbird (<8), Song Thrush (<10) and Meadow Pipit (<15) noted

foraging in fields at south side (mainly at the east side) of site at 13.30hrs. Passerines present in hedgerow habitat around site included Chaffinch (<15 mainly at west side along railway embankment), Goldfinch (<20 foraging in small flocks of 3-4 around site especially in center of site), Redpoll (<2), Bullfinch (<5 on the west side), House Sparrow (<6 at the north end of site), Woodpigeon (<20), Goldcrest (<2 at south end,) Starling (<80 at north side of site), Long-tailed Tit (<10), Blue Tit (<2) and Great Tit (<2).

January 26th, 2024

Sunrise- 08.19hrs/Sunset 16.55hrs. Weather – Wind F3 Southwest, Cloud 3/8, Dry, 6c, Excellent visibility. On-site 10.45hrs – 16.45hrs.

Species recorded – Red Kite, Buzzard, Snipe, Black-headed Gull, Common Gull, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Fieldfare, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Linnet, Redpoll, Goldfinch, Bullfinch, Reed Bunting, Yellowhammer.

10.45hrs-12.00hrs – Site traversed from northwest to east to southeast and back north on east side, Snipe (<5) flushed from fields at northwest side of site (near main entrance) and 4 more from the southeast corner fields of the site. Thrush flock foraging in fields at the northeast corner of the site at 11.15hrs comprising of Redwing (<25), Fieldfare (<8) and Mistle Thrush (<2). Buzzard (<1) foraging in center of site at 11.50hrs. Small numbers of Herring Gull (<10) and Black-headed Gull (<12) and Common Gull (<8) noted mainly passing over the site. Passerines present in the hedgerows included Yellowhammer (<2 at east side of site), Reed Bunting (<2 at southeast corner of site), Goldcrest (<2 at south side of site), Blackbird (<12) and Song Thrush (<6), Chaffinch (<5), Starling (<60), Dunnock (<4) all foraging at the east side of the site.

12.00hrs-16.45hrs – Red Kite (<1) observed passing south over the center of site at 13.05hrs. Buzzard (<2) noted foraging intermittently in fields at the east side of the site during the afternoon. Snipe (<2) flushed from the southwest corner of the site at 13.15hrs. Redwing (<35), Fieldfare (<10), Blackbird (<5) and Song Thrush (<8) noted foraging in fields at north side of site at 14.00-14.40hrs. Passerines present in hedgerow habitat around site including Meadow Pipit (<10 mainly in south), Wren (<7), Chaffinch (<15 mainly at east side), Goldfinch (<20 foraging in small flocks around site), Bullfinch (<3 in southeast fields), Woodpigeon (<50), Linnet (<8 at west side of site adjacent railway), Redpoll (<2 at east side), Goldcrest (<3 at south end,) Starling (<80 in north and center of site), Long-tailed Tit (<6), Blue Tit (<5), Coal Tit (<1).

3 Hares noted during the day in fields around the site (foraging and resting). Also 2 Fox.

February 10th, 2024

Sunrise- 07.54hrs/Sunset 17.24hrs. Weather – Wind F2 East, Cloud 6/8, Dry, 4c, Excellent visibility. On-site 08.15hrs – 14.15hrs.

Species recorded – Mallard, Red Kite, Sparrowhawk, Buzzard, Snipe, Black-headed Gull, Common Gull, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Raven, Starling, House Sparrow, Chaffinch, Linnet, Redpoll, Goldfinch, Bullfinch, Yellowhammer.

08.15hrs-12.00hrs – Site traversed from northwest to southwest and back north on east side, Snipe (<3) flushed from fields at northwest side of site (near main entrance) and 3 more from the southeast corner fields of the site. Thrushes foraging in fields at the south end of the site comprising of Redwing (<40), Mistle Thrush (<4), Song Thrush (<10) and Blackbird (<7). Buzzard (<3) foraging around the site, 2 at the east side and another noted at the northwest corner of the site. Small numbers of Herring Gull (<15) and Black-headed Gull (<10) and Common Gull (<4) noted passing over the site, only Black-headed Gull (<3) noted foraging on-site at the south end in fields. Passerines present in the hedgerows

included Yellowhammer (<3 at east side of site), Goldcrest (<2 at south side of site), Chaffinch (<8 at east side), Linnet (<5 at east side), Starling (<40 at south end), Dunnock (<6), Wren (<8), Robin (<6), Meadow Pipit (<10), Pied Wagtail (<2 at south end).

12.00hrs-14.15hrs – Mallard (<2) were flushed from the small pond in the southeast corner of the site. A Sparrowhawk was observed hunting in middle of site at 12.40hrs and again at the northwest corner of the site at 13.35hrs. Red Kite (<1) observed soaring over the east side of the site at 13.10hrs. Redwing (<8) and Meadow Pipit (<5) observed foraging at the northeast corner of the site. Passerines present in hedgerow habitat around site including Wren (<5), Goldfinch (<15 foraging in small flocks around site), Bullfinch (<2 in east fields), Woodpigeon (<30), Redpoll (<1 at south side), Starling (<80 in north and center of site), Long-tailed Tit (<6), Blue Tit (<5), Great Tit (<2). Black-headed Gull (<4) noted foraging in fields at the northeast corner of the site. Raven (<2) passed west over middle of site at 12.50hrs.

1 Hare noted during the day in fields around the site. Also 1 Fox.

February 26th, 2024

Sunrise- 07.20hrs/Sunset 17.56hrs. Weather – Wind F3 Northwest, Cloud 3/8, Dry, 3c, Excellent visibility. On-site 11.00hrs – 17.00hrs.

Species recorded – Red Kite, Buzzard, Snipe, Grey Heron, Pheasant, Black-headed Gull, Herring Gull, Common Gull, Feral Pigeon, Woodpigeon, Meadow Pipit, Pied Wagtail, Dunnock, Robin, Song Thrush, Redwing, Fieldfare, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Coal Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Starling, House Sparrow, Chaffinch, Bullfinch, Linnet, Goldfinch, Reed Bunting, Yellowhammer.

11.00hrs-12.00hrs – Site traversed from north to south at the west side and then around to east side and back north, Snipe (<4) flushed from field at northwest corner of site and field adjacent the main entrance. Yellowhammer (<2), Linnet (<8), Chaffinch (<11), Bullfinch (<1), House Sparrow (<4), Long-tailed Tit (<5), Reed Bunting (<2), Robin (<3), Wren (<2) and Dunnock (<4) noted foraging in hedgerows at northwest and west side of the site. Small numbers of Herring Gull (<8) and Black-headed Gull (<10) noted passing over site, not observed to forage on-site.

12.00hrs-17.00hrs – Snipe (<6) were flushed in fields at the southwest and south side of the site, birds as usual flushed from the waterlogged sections of fields mainly. A Red Kite was observed soaring over the middle of the site at 13.15hrs and again at 14.40hrs over the north end of the site. Minimum of 3 Buzzard observed around the site in the afternoon, observed foraging on ground in fields on the west side. Redwing (<22), Fieldfare (<10), Mistle Thrush (<1), Song Thrush (<5) and Blackbird (<3) observed foraging in fields at the south end of the site. A Grey Heron passed northwest over the west side of the site at 15.10hrs. Pheasant (<2) noted foraging in center of site at 13.45hrs. Passerines recorded around site included Meadow Pipit (<minimum of 25 mainly at the west and south fields), Woodpigeon (<25), Blue Tit (<5), Great Tit (<2 in center of site), Coal Tit (<1), Starling (two foraging flocks, one of 30 birds in south and another flock of 50 birds at the east side of site). Herring and Black-head Gull noted passing over site in small numbers, not observed foraging on-site.

2 Hares were noted around site during survey.

March 11th, 2024

Sunrise- 06.48hrs/Sunset 18.23hrs. Weather – Wind F1 South, Cloud 8/8, Dry, 8c, Excellent visibility. On-site 07.30hrs – 13.30hrs.

Species recorded – Buzzard, Snipe, Jack Snipe, Mallard, Pheasant, Black-headed Gull, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Chiffchaff, Dunnock, Robin, Stonechat, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Raven, Starling, Chaffinch, Linnet, Redpoll, Siskin, Goldfinch.

07.30hrs-12.00hrs – Site traversed from north side to south side at the west side and then around to east side and back north, Snipe (<8) single flushed from field at northwest corner of site and seven

more in fields at the southeast and east side of the site. Mallard (<2) flushed from a ditch at the northwest corner of the site. Meadow Pipit (<4), Chiffchaff (<1), Chaffinch (<2), Goldfinch (<5), Linnet (<3), Stonechat (<3), Robin (<2), Goldcrest (<1), Great Tit (<2), Blackbird (<2), Dunnock (<2) and Redwing (<4) noted foraging along the west and southwest corner of site. Buzzard (<2) soaring over conifers at south of site at 11.40hrs). Herring Gull (<5) noted passing over the site. Siskin (<3 in song in conifers at south end of the site), Goldcrest (<4 also in conifers at the south end). Mistle Thrush (<2), Pied Wagtail (<1), Blue Tit (<2), Redpoll (<2), Chiffchaff (<1), Blackbird (<3) noted foraging in fields at the southeast corner of the site. Raven (<1 calling from conifers at the south end of site at 11.30hrs).

12.00hrs-13.30hrs

Snipe (<1) flushed and Jack Snipe (<1) flushed from the northwest corner of the site at 12.42hrs. Pheasant (<1) and Buzzard (<1) also foraging around the center of the site at 12.15hrs.

1 Hare and 3 Fox were noted around site during survey.

March 27th, 2024

Sunrise- 06.09hrs/Sunset 18.51hrs. Weather – Wind F2 South, Cloud 6/8, Dry, 6c, Excellent visibility.
On-site 12.00hrs – 18.00hrs.

Species recorded – Buzzard, Red Kite, Snipe, Pheasant, Herring Gull, Woodpigeon, Meadow Pipit, Pied Wagtail, Chiffchaff, Dunnock, Robin, Stonechat, Song Thrush, Redwing, Mistle Thrush, Blackbird, Goldcrest, Wren, Great Tit, Blue Tit, Long-tailed Tit, Magpie, Jackdaw, Rook, Hooded Crow, Raven, Starling, Chaffinch, Linnet, Redpoll, Siskin, Greenfinch, Goldfinch.

12.00hrs-18.00hrs – Site traversed from north side to south side at the west side and then around to east side and back north, Snipe (<3) single flushed from field at northwest corner of site and 2 more in fields at the southeast corner of the site. Meadow Pipit (<6) Song Thrush (<3), Blue Tit (<4), Chaffinch (<4), Greenfinch (<1), Goldfinch (<8), Stonechat (<2), Robin (<4), Dunnock (<3), Blackbird (<2) were noted foraging along the west and southwest corner of site. Sparrowhawk (<1) hunting around center of site at 14.20hrs. Buzzard (<2) soaring around site intermittently throughout the afternoon and observed perched and calling from the conifers at the south end of the site, possibly a potential nest site location. Red Kite (<1) observed twice soaring over the west side of the site at 12.15hrs and at 14.05hrs at the northwest corner of the site. Stonechat (<2 a pair noted in the southwest corner of the site). Redwing (<2 noted foraging at the north end of the site at 16.10hrs). Mistle Thrush (<3, two at south end of site and 1 at the north end of the site). Chiffchaff (<4 noted in the hedgerows in the center of the site were likely newly arrived migrants). Robin (<3), Dunnock (<5) Song Thrush (<3), Blackbird (<2), Wren (<5), Long-tailed Tit (<8), Blue Tit (<4), Great Tit (<2), Goldcrest (<1), Goldfinch (<3) and Siskin (<1) all noted foraging along east side of the site, Blackbird and Long-tailed Tit were observed carrying nest building material. Raven (<1) flew west over the north end of the site at 12.25hrs and a pair were observed perched in trees at the southeast corner of the site at 15.50hrs.

2 Hare were noted on-site during survey (northwest corner the of site).

Comments and observations on survey results

In total 50 species were recorded over 9 surveys at Tinahask Lower, Arklow, during the winter bird surveys in 2023-2024, two species **red-listed** as species listed as of conservation concern (per Birdwatch Ireland's species of conservation concern 2020-2026) recorded on-site, were wintering **Snipe** and **Redwing**. Snipe were recorded around the site on all surveys, similar to previous surveys favoring the fields adjacent the main entrance and northwest and also in the south and southeast area of the site, numbers varied between 2-3 birds recorded on dates in November and March, to up to 13 on other dates, with the peak counts peak of 13 birds recorded on December 5th and January 10th, with the birds again utilizing the wetter areas on-site throughout the winter as a feeding opportunity. Redwing were also recorded on almost all surveys (except November) with peak counts of 75 on December 19th and 145+ on January 10th. Wintering amber-listed species recorded included Herring Gull, Black-headed Gull, and Common Gull, these were recorded foraging on-site in small numbers only (almost all in single figures for each species). Red Kite was observed passing over the site again on several dates, but not recorded foraging on-site, Buzzard was observed foraging on-site

occasionally. Passerine species recorded were consistent throughout the surveys with the well-established hedgerow habitat affording a good range of species. Results suggest that the site is not significant ex-situ foraging or roosting site for species of qualifying interest from nearby Special protection areas (SPA's).



2024/2025 Wintering Bird Assessment at Tinahask Upper, Money Big,
Money Little, Arklow, Co. Wicklow.



6th October 2026

Prepared by: Gayle O'Farrell of Altemar Ltd.
On behalf of: Castlethorn Construction

Document Control Sheet			
Client	Castlethorn Construction		
Project	2024/2025 Wintering Bird Assessment at at TinahaskAssessment at Tinahask Upper, Money Big, Money Little, Arklow, Co. Wicklow.		
Report	Wintering Bird Assessment		
Date	6th October 2026		
Version	Author	Reviewed	Date
Final	Gayle O'Farrell		6th October 2026

Summary

Structure/features:	The site is predominantly agricultural fields and boundary hedgerows. There are no pre-existing structures within the proposed site.
Location:	Tinahask Upper, Money Big, Money Little, Arklow, Co. Wicklow
Bird species present:	Blackbird, Blackcap, Black-headed Gull, Blue tit, Bullfinch, Buzzard, Chaffinch, Chiffchaff, Coal tit, Common Gull, Dunnock, Feral Pigeon, Goldcrest, Goldfinch, Great tit, Greenfinch, Herring Gull, Hooded Crow, Jackdaw, Long-tailed tit, Magpie, Mallard, Meadow Pipit, Mistle Thrush, Moorhen, Mute Swan, Pheasant, Pied Wagtail, Reed Bunting, Robin, Rook, Snipe, Song thrush, Starling, Stonechat, Whooper Swan, Woodpigeon, Wren.
Proposed work:	Large-scale Residential Development
Surveys by:	Emma Peters & Jack Doyle of Altemar Ltd.
Survey dates:	27 th November 2024, 6 th December 2024, 30 th January 2025, 20 th February 2025 and 6 th March 2025.



0 0.2 0.4 0.6 0.8 1 km

Project: Tinahask Upper, Arklow
 Location: Arklow, Co. Wicklow
 Date: 5th October 2026
 Drawn By: Bryan Deegan (Altamar)

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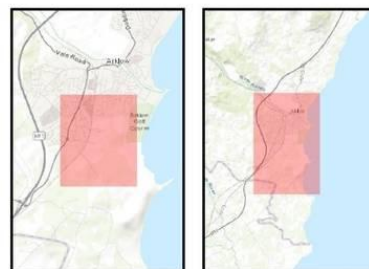


Figure 1. Site Outline and Survey Area

Competency of Assessor

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments. Bryan Deegan, the managing director of Altemar, is an Environmental Scientist and Marine Biologist with 30 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently lead project ecologist for Project Pembroke and was contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds an MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and an NCEA National Certificate in Science (Aquaculture).

This Report has been contributed to by Emma Peters. Emma has carried out a range of wintering and breeding ornithological surveys in Ireland. Emma has experience in bat detection through static detector surveys, dusk emergence, and dawn re-entry surveys and is a member of Bat Conservation Ireland. She is also skilled in habitat identification, native and non-native species identification and terrestrial mammal surveys.

Jack Doyle (MSc Sustainable Environments) contributed to the survey effort for this assessment. Jack has carried out a wide range of flora and fauna surveys and produced ecological assessments on numerous residential, commercial, and infrastructure projects in Ireland. These include breeding ornithological surveys, roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, and habitat identification.

Legislative context

The Wildlife Act 1976 protects wild birds in Ireland. Based on this legislation it is an offence to wilfully interfere with or destroy wild birds and their nests and eggs (other than the wild species mentioned in the Third Schedule of this Act). Under this legislation it is an offence for any person who *"wilfully takes or removes the eggs or nest of a protected wild bird otherwise than under and in accordance with such a licence, wilfully destroys, injures or mutilates the eggs or nest of a protected wild bird, wilfully disturbs a protected wild bird on or near a nest containing eggs or unflown young."*

Habitats Directive- Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora has been transposed into Irish Law, including, via, *inter alia*, the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

Council Directive 2009/147/EC 2010 on the conservation of wild birds provides for the conservation of wild birds by, among other things, classifying important ornithological sites as Special Protection Areas. The Directive relates to the conservation of all species of naturally occurring birds in the wild state, their eggs, nests and habitats in the European territory of the Member States. The Directive prohibits in particular:

- deliberate killing or capture by any method;
- deliberate destruction of, or damage to, their nests and eggs or removal of their nests;
- taking their eggs in the wild and keeping these eggs even if empty;
- deliberate disturbance of these birds particularly during the period of breeding and rearing, in so far as disturbance would be significant having regard to the objectives of this Directive;
- keeping birds of species the hunting and capture of which is prohibited.

Under the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), notwithstanding any consent, statutory or otherwise, given to a person by a public authority or held by a person, except in accordance with a licence granted by the Minister under Regulation 54, a person who in respect of the species referred to in Part 1 of the First Schedule:

- deliberately captures or kills any specimen of these species in the wild,
- deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,
- deliberately takes or destroys eggs of those species from the wild,
- damages or destroys a breeding site or resting place of such an animal, or

- keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive, shall be guilty of an offence.

Wintering bird surveys

This report presents the methodology and results of 5 visits to Tinahask Upper, Arklow by Emma Peters and Jack Doyle between November 2024 and March 2025.

Survey methodology

Wintering bird surveys were carried out during the wintering bird season at Tinahask Upper in order to gather baseline data to assist in assessing the potential impacts on wintering birds from future proposed developments on the site, in particular those listed as Qualifying Interests of SPAs within 15 km and other amber/red-listed birds of conservation concern in Ireland (BoCCI). Potential impacts on wintering bird species include disturbance, destruction of foraging areas, destruction of roosting areas and collision risk during construction and operation (cranes, buildings etc.). These wintering bird surveys were carried out based on the BTO Common Bird Census (Bibby *et al.*, 2000 and Gilbert *et al.*, 1998) and I-WeBS Counter Manual: Guidelines for Irish Wetland Bird Survey counters (BWI & NPWS), following CIEEM guidelines.

A 15-minute settlement period was given following arrival to allow resumption of bird activity after any possible disturbance caused by arrival to the site. A roving transect survey around the perimeter was carried out on each occasion, providing clear views of all areas within and over that survey area. Flight lines, large flights, foraging, perching, bathing and any other observed behaviour by wintering bird species and other species observed within, over and immediately adjacent to the survey area were recorded. Each survey was carried out by a single surveyor. A pair of binoculars was used by the surveyor to identify and count birds at distance.

Care was taken not to double count any observations. Surveys were initiated at varying times (morning/midday/afternoon) to account for fluxes in bird activity and birds transiting to/from foraging and roosting areas. Local temperatures varied from 0 – 10°C. Winds varied from 2– 5 on the Beaufort scale. Weather conditions were favourable on all occasions.

Peak counts for the survey area were compared to 1% national and international population sizes of relevant species for which data was available. Foraging areas, flight paths, large flights and other observations were mapped according to field sheet records.



0 0.2 0.4 0.6 0.8 km

Project: Tinahask Upper, Arklow
Location: Arklow, Co. Wicklow
Date: 7th October 2026
Drawn By: Bryan Deegan (Altamar)

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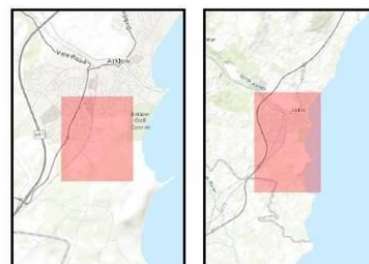


Figure 2. Survey Area and Vantage Points

Survey Results/Discussion

Habitats of Wintering Bird Potential

A desk and ground level wintering bird habitat assessment was carried out and used to examine the structures, features and vegetation on site that could provide wintering bird habitat. Potential features associated with foraging/roosting include agricultural fields, improved/amenity grassland, scrub, watercourses and drainage ditches. All open areas, vegetated areas, built areas and water-holding features within and immediately adjacent to the site were assessed for wintering bird potential.

The site comprises a series of fields dominated by grassland pasture, which are managed primarily for cattle grazing and silage production. The fields are generally enclosed by hedgerows, with more extensive and structurally developed hedgerows present through the central portion of the site and along the eastern boundary. These hedgerows provide additional opportunities for shelter, cover and foraging for wintering bird species, particularly species associated with farmland and hedgerow habitats. The relatively enclosed nature of the site and the absence of extensive areas of open arable ground limit its potential to support large aggregations of wintering waterbirds or farmland birds typically associated with open agricultural landscapes.

A small pond is located within the field at the south-eastern corner of the site. This feature provides a localised source of standing water and may provide limited opportunities for foraging and drinking by wintering bird species, although its relatively small size limits its potential to support significant numbers of wintering waterbirds.

Overall, the site provides low to moderate potential for wintering birds, primarily through its grassland fields, hedgerow network and small areas of standing water. The habitats present are considered more likely to support individual or small numbers of common and widespread farmland and garden-associated species rather than significant concentrations of wintering birds.

Wintering Bird Activity Survey

A total of 38 species were recorded within, above and immediately adjacent to the survey area across 5 surveys. Twenty-six green, ten amber and two red bird species of conservation concern in Ireland (BoCCI) were recorded either within, over and immediately adjacent to the survey area. Details regarding the status, behaviour and abundances of species recorded on/over/adjacent to the site relevant to the conservation interests of Special Protection Areas (SPAs) and red listed BoCCI are discussed below.

Meadow pipit (red BoCCI) was observed foraging mainly in the southeast portion of the survey area (Figure 3). Peak count was 28 individuals.

Snipe (red BoCCI) were recorded on seven occasions across five wintering bird surveys. All records related to birds flushed from the grassland within the survey area. (Figure 4). The maximum number of individuals recorded on any single survey was one. The repeated presence of snipe indicates that the site is used periodically by the species during the winter period, although the low numbers recorded and the absence of observed feeding activity suggest that the site is not of particular importance for supporting larger numbers of wintering snipe.

Black-headed Gull (amber BoCCI) was recorded on three occasions. Majority of observations were made of large flights above the survey area (Figure 5). No foraging of this species within the survey area was recorded. Peak count was 8 individuals.

Common Gull (amber BoCCI) was recorded on three occasions across three surveys in flight above the survey area (Figure 6). No observations of this species foraging were recorded within the survey area. Peak count was 5 individuals.

Herring Gull (amber BoCCI) was recorded during three surveys, with six observations made in total. All records related to birds transiting across the survey area or circling overhead. No herring gulls were observed foraging within the survey area. The peak count was ten individuals (Figure 7), indicating that the site is used occasionally for passage by the species but does not appear to provide a significant foraging resource for herring gull.

Mallard (amber BoCCI) was observed on one occasion in the southern portion of the survey area within the grassland (Figure 4). Peak count was one individual.

Starling (amber BoCCI) was recorded foraging in the site boundary on two occasions and on one occasion in the wider survey area. Peak count was 30 individuals. These observations indicate that the site and surrounding area provide some foraging opportunities for starling during the winter period.

Table 1. Species recorded within, above and/or immediately adjacent to the survey

Common Name	BTO	Latin Name	BoCCI
Blackbird	B.	<i>Turdus merula</i>	Green
Blackcap	BC	<i>Sylvia atricapilla</i>	Green
Black-headed gull	BH	<i>Chroicocephalus ridibundus</i>	Amber
Blue tit	BT	<i>Cyanistes caeruleus</i>	Green
Bullfinch	BF	<i>Pyrrhula pyrrhula</i>	Green
Buzzard	BZ	<i>Buteo buteo</i>	Green
Chaffinch	CH	<i>Fringilla coelebs</i>	Green
Chiffchaff	CC	<i>Phylloscopus collybita</i>	Green
Coal tit	CT	<i>Periparus ater</i>	Green
Common gull	CM	<i>Larus canus</i>	Amber
Dunnock	D.	<i>Prunella modularis</i>	Green
Feral pigeon	FP	<i>Columba livia f. domestica</i>	Green
Goldcrest	GC	<i>Regulus regulus</i>	Amber
Goldfinch	GO	<i>Carduelis carduelis</i>	Green
Great tit	GT	<i>Parus major</i>	Green
Greenfinch	GR	<i>Chloris chloris</i>	Amber
Herring gull	HG	<i>Larus argentatus</i>	Amber
Hooded crow	HC	<i>Corvus cornix</i>	Green
Jackdaw	JD	<i>Corvus monedula</i>	Green
Long-tailed tit	LT	<i>Aegithalos caudatus</i>	Green
Magpie	MG	<i>Pica pica</i>	Green
Mallard	MA	<i>Anas platyrhynchos</i>	Amber
Meadow pipit	MP	<i>Anthus pratensis</i>	Red
Mistle thrush	M.	<i>Turdus viscivorus</i>	Green
Moorhen	MH	<i>Gallinula chloropus</i>	Green
Mute swan	MS	<i>Cygnus olor</i>	Amber
Pheasant	PH	<i>Phasianus colchicus</i>	Green
Pied wagtail	PW	<i>Motacilla alba yarrellii</i>	Green
Reed bunting	RB	<i>Emberiza schoeniclus</i>	Green
Robin	R.	<i>Erithacus rubecula</i>	Green
Rook	RO	<i>Corvus frugilegus</i>	Green
Snipe	SN	<i>Gallinago gallinago</i>	Red
Song thrush	ST	<i>Turdus philomelos</i>	Green
Starling	SG	<i>Sturnus vulgaris</i>	Amber
Stonechat	SC	<i>Saxicola rubicola</i>	Amber
Whooper swan	WS	<i>Cygnus cygnus</i>	Amber
Woodpigeon	WP	<i>Columba palumbus</i>	Green
Wren	WR	<i>Troglodytes troglodytes</i>	Green

Table 2. Peak counts of bird species recorded within, above and/or immediately adjacent to the survey area.

Species	Peak count (2024/2025)	1% national	1% international
Blackbird	33		
Blackcap	5		
Black-headed gull	8		>10,000
Blue tit	9		
Bullfinch	5		
Buzzard	2		
Chaffinch	6		
Chiffchaff	3		
Coal tit	2		
Common gull	5		>10,000
Dunnock	17		
Feral pigeon	15		
Goldcrest	5		
Goldfinch	94		
Great tit	21		
Greenfinch	1		
Herring gull	10		>100,000
Hooded crow	48		
Jackdaw	73		
Long-tailed tit	24		
Magpie	28		
Mallard	1	280	53,000
Meadow pipit	28		
Mistle thrush	1		
Moorhen	3		
Mute swan	1		100
Pheasant	1		
Pied wagtail	4		
Reed bunting	2		
Robin	14		
Rook	42		
Snipe	1		>10,000
Song thrush	7		
Starling	30		
Stonechat	1		
Whooper swan	2		
Woodpigeon	111		
Wren	23		



Figure 3. Observations of Meadow Pipit on Site



Project: Tinahask Upper.
 Location: Arklow, Co. Wicklow
 Date: 1st October 2026.
 Drawn By: Emma Peters (Altamar).

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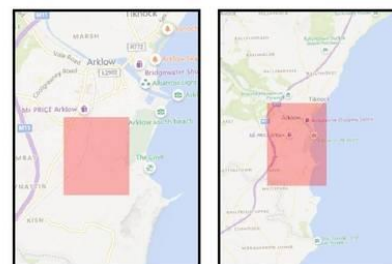


Figure 4. Observations of Snipe, Mallard, and Greenfinch on Site



Figure 5. Black-headed Gull Flightlines (m)

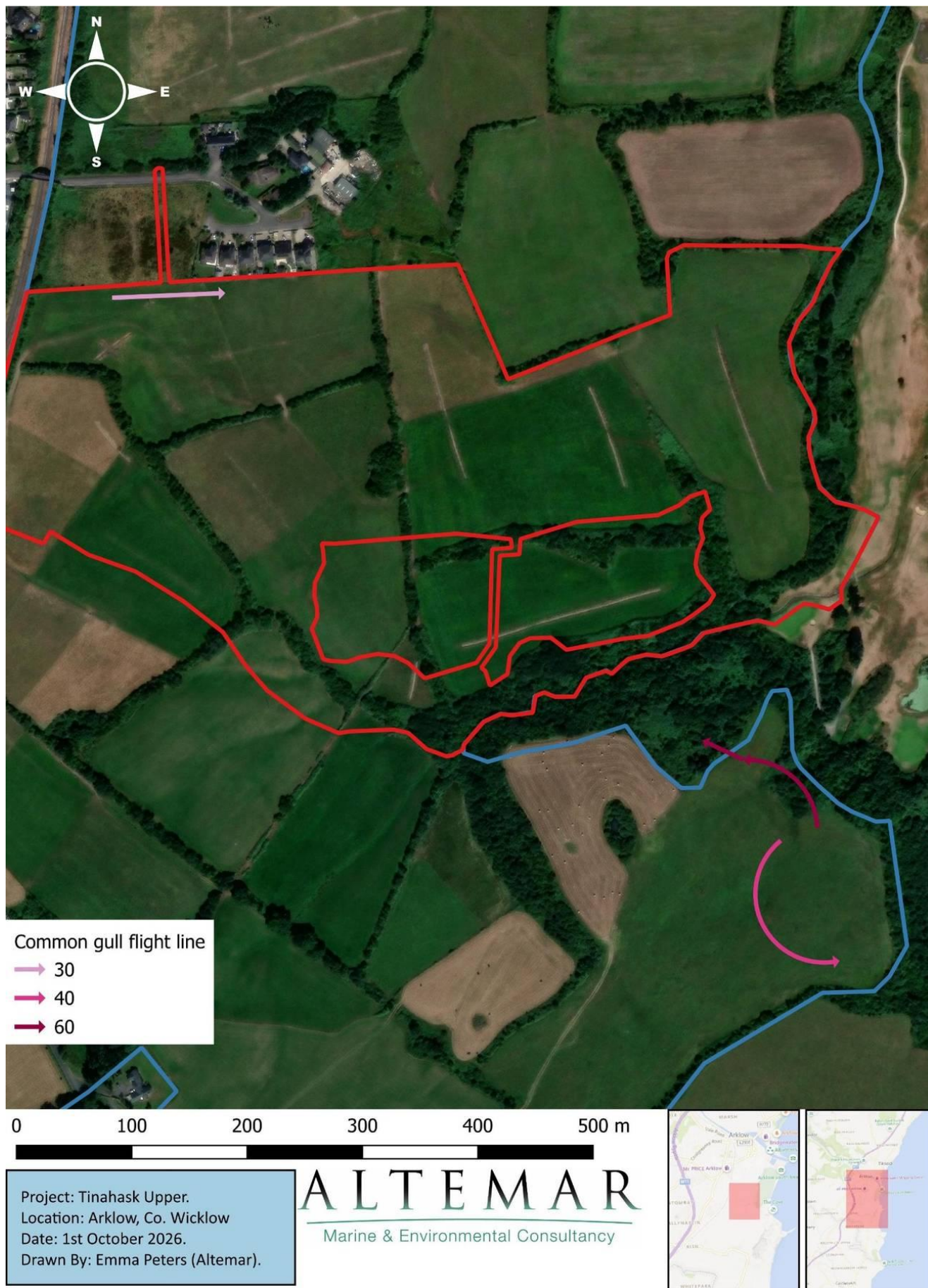


Figure 6. Common Gull Flightlines (m)

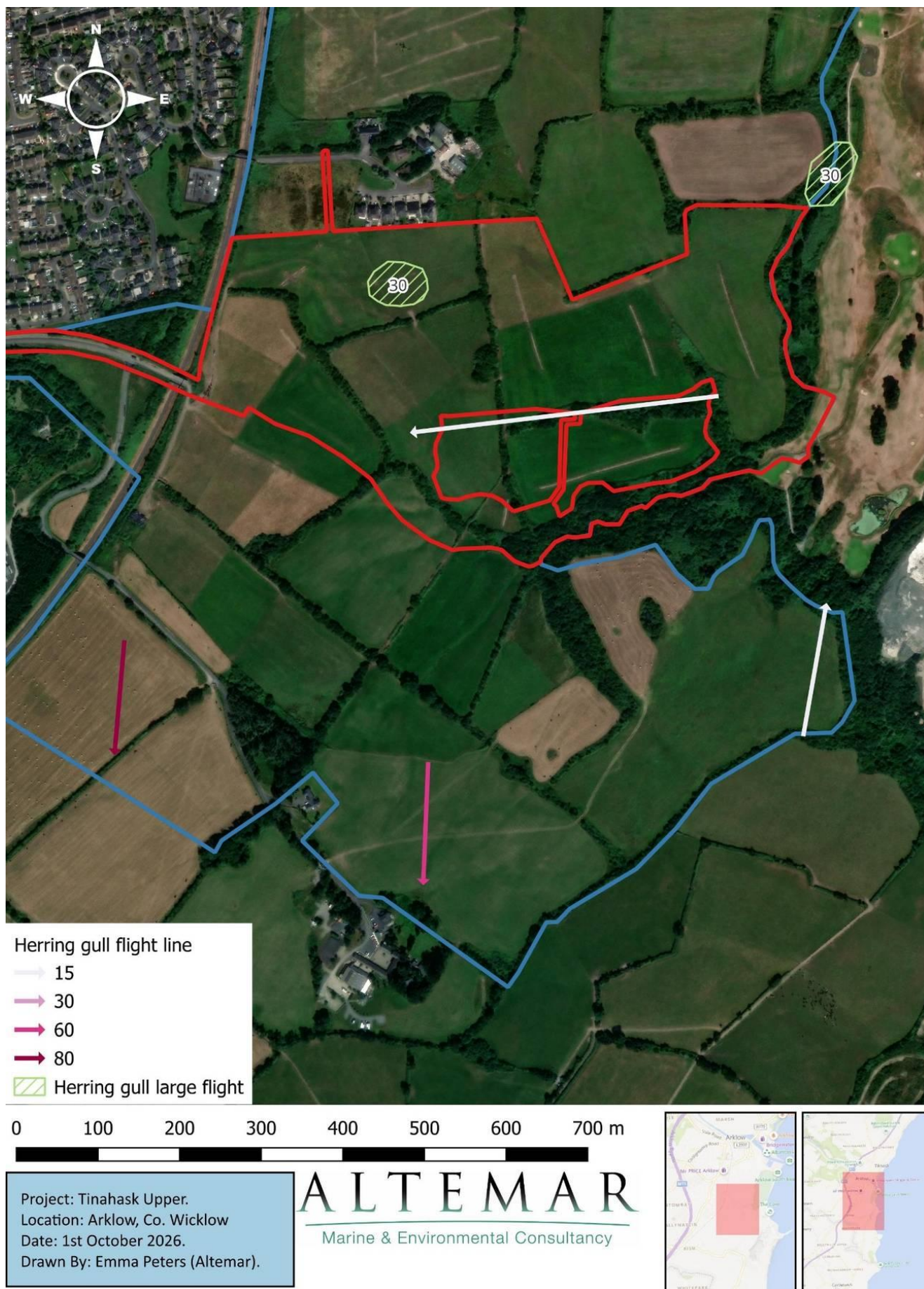


Figure 7. Herring Gull Flightlines (m)



Project: Tinahask Upper.
 Location: Arklow, Co. Wicklow
 Date: 1st October 2026.
 Drawn By: Emma Peters (Altamar).

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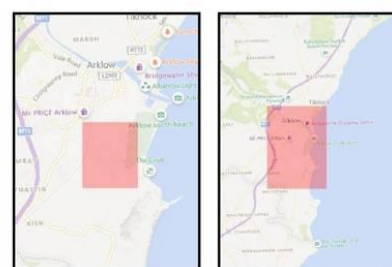


Figure 8. Buzzard Flightline (m)



Project: Tinahask Upper.
 Location: Arklow, Co. Wicklow
 Date: 1st October 2026.
 Drawn By: Emma Peters (Altemar).

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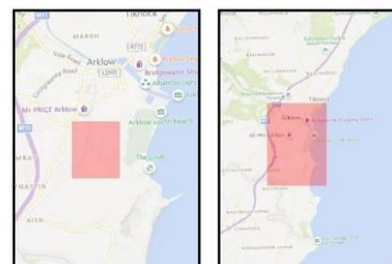


Figure 9. Starling Foraging Areas

Wintering Bird Assessment Findings

Review of local bird records

The review of existing bird records (sourced from NBDC Database) within a 2 km² grid (Reference grids T27K) encompassing the study area reveals that 53 known bird species have previously been observed and recorded locally (*Table 3*).

Table 3: NBDC bird records within 2 km² (grids T27K)

Species name	Date of last record	Title of dataset	Designation
Blackbird (<i>Turdus merula</i>)	27/05/2024	Birds of Ireland	
Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	07/10/2020	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Blue Tit (<i>Cyanistes caeruleus</i>)	23/07/2017	Birds of Ireland	
Bullfinch (<i>Pyrrhula pyrrhula</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Buzzard (<i>Buteo buteo</i>)	23/04/2023	Birds of Ireland	
Chaffinch (<i>Fringilla coelebs</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Chiffchaff (<i>Phylloscopus collybita</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	
Coal Tit (<i>Periparus ater</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Collared Dove (<i>Streptopelia decaocto</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Common Gull (<i>Larus canus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Cormorant (<i>Phalacrocorax carbo</i>)	07/10/2020	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Curlew (<i>Numenius arquata</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Dunnock (<i>Prunella modularis</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Fulmar (<i>Fulmarus glacialis</i>)	25/05/2019	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Gannet (<i>Morus bassanus</i>)	06/06/2017	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Goldcrest (<i>Regulus regulus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List

Species name	Date of last record	Title of dataset	Designation
Goldfinch (<i>Carduelis carduelis</i>)	07/10/2020	Birds of Ireland	
Great Black-backed Gull (<i>Larus marinus</i>)	27/05/2024	Birds of Ireland	
Great Tit (<i>Parus major</i>)	27/05/2024	Birds of Ireland	
Greenfinch (<i>Chloris chloris</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Grey Wagtail (<i>Motacilla cinerea</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Herring Gull (<i>Larus argentatus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Hooded Crow (<i>Corvus cornix</i>)	27/05/2024	Birds of Ireland	
House Martin (<i>Delichon urbicum</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
House Sparrow (<i>Passer domesticus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Jackdaw (<i>Coloeus monedula</i>)	27/05/2024	Birds of Ireland	
Linnet (<i>Linaria cannabina</i>)	27/05/2024	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Magpie (<i>Pica pica</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Meadow Pipit (<i>Anthus pratensis</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Mistle Thrush (<i>Turdus viscivorus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts
Oystercatcher (<i>Haematopus ostralegus</i>)	07/10/2020	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Peregrine (<i>Falco peregrinus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species
Pheasant (<i>Phasianus colchicus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Pied Wagtail (<i>Motacilla alba</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Raven (<i>Corvus corax</i>)	27/05/2024	Birds of Ireland	

Species name	Date of last record	Title of dataset	Designation
Red-throated Diver (<i>Gavia stellata</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Redwing (<i>Turdus iliacus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Reed Bunting (<i>Emberiza schoeniclus</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	
Ringed Plover (<i>Charadrius hiaticula</i>)	25/05/2019	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Robin (<i>Erithacus rubecula</i>)	27/05/2024	Birds of Ireland	Protected Species: Wildlife Acts
Rock Pipit (<i>Anthus petrosus</i>)	27/05/2024	Birds of Ireland	
Rook (<i>Corvus frugilegus</i>)	27/05/2024	Birds of Ireland	
Sand Martin (<i>Riparia riparia</i>)	12/09/2018	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Sedge Warbler (<i>Acrocephalus schoenobaenus</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	
Skylark (<i>Alauda arvensis</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Song Thrush (<i>Turdus philomelos</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Starling (<i>Sturnus vulgaris</i>)	31/12/2011	Bird Atlas 2007 - 2011	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Stonechat (<i>Saxicola rubicola</i>)	27/05/2024	Birds of Ireland	Protected Species: Wildlife Acts
Swallow (<i>Hirundo rustica</i>)	27/05/2024	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Swift (<i>Apus apus</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Willow Warbler (<i>Phylloscopus trochilus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Woodpigeon (<i>Columba palumbus</i>)	27/05/2024	Birds of Ireland	

Species name	Date of last record	Title of dataset	Designation
Wren (<i>Troglodytes troglodytes</i>)	31/12/2011	Bird Atlas 2007 - 2011	

I-WeBS

I-WeBS National and Site Trends Report 1994/95 – 2019/20 report presents national and site-specific trends of wetland birds in Ireland. The nearest I-Webs sites are Avoca River/Arklow (OT399) and Arklow Ponds (OT002) (c. 1.2km). The proposed development site is not considered to be of relevance to any i-webs site. The national trends report is shown in Figure 10.

National Summary

Species	Trend (%)			Long Term Trend
	National - 5 Year	National - 12 Year	National - 23 Year	
Scoup	-33.6	-82.9	-89.2	Large Decline
Pochard	-19.8	-60.4	-79.1	Large Decline
Goldeneye	-32.5	-39.0	-66.9	Large Decline
Lapwing	-6.5	-45.1	-63.9	Large Decline
Gray Plover	-30.6	-39.4	-57.8	Large Decline
Golden Plover	-16.9	-58.1	-54.1	Large Decline
Dunlin	5.9	-21.2	-45.2	Moderate Decline
Curlew	-9.4	-23.7	-43.1	Moderate Decline
Turnstone	-33.6	-46.0	-23.7	Intermediate Decline
Coot	-10.1	1.1	-23.2	Intermediate Decline
Mallard	-11.3	-19.7	-19.1	Intermediate Decline
Wigeon	0.9	-17.0	-18.2	Intermediate Decline
Tufted Duck	-20.7	-28.9	-17.9	Intermediate Decline
Red-breasted Merganser	-12.9	5.2	-14.7	Intermediate Decline
Pintail	-0.8	-6.0	-13.7	Intermediate Decline
Great Crested Grebe	-39.5	-6.1	-10.8	Intermediate Decline
Shoveler	23.0	-21.3	-10.8	Intermediate Decline
Knot	0.0	-12.2	-9.8	Intermediate Decline
Bar-tailed Godwit	-32.6	-13.9	-5.1	Intermediate Decline
Ringed Plover	-4.3	-26.8	-1.1	Intermediate Decline
Gray Heron	1.0	-4.9	6.6	Stable or Increasing
Redshank	-14.0	-28.4	6.7	Stable or Increasing
Shelduck	6.3	-0.8	9.3	Stable or Increasing
Oystercatcher	-17.5	-31.1	10.8	Stable or Increasing
Mute Swan	4.6	9.6	13.8	Stable or Increasing
Teal	1.8	5.7	19.4	Stable or Increasing
Purple Sandpiper	-36.4	-37.6	23.5	Stable or Increasing
Godwall	-26.5	4.3	24.4	Stable or Increasing
Little Grebe	6.1	16.7	38.2	Stable or Increasing
Greenshank	0.9	7.3	41.0	Stable or Increasing
Cormorant	38.5	8.4	42.9	Stable or Increasing
Sanderling	-23.8	-11.1	84.6	Stable or Increasing
Black-tailed Godwit	22.5	25.0	92.3	Stable or Increasing
Light-bellied Brant Goose	-11.2	1.2	93.3	Stable or Increasing
Little Egret	34.6	61.5	483.3	Stable or Increasing

Figure 10. I-WeBS National Trends Report.

Mitigation

The proposed site is of low importance to the local wintering bird population. There is the potential for negative impacts by loss of foraging habitat and during construction phase through collision risks to species transiting to and from foraging and roosting areas. Out of an abundance of caution, the following mitigation measures relevant to birds should be implemented to minimise any potential negative impact on biodiversity:

- Retention of hedgerows and treelines: Hedgerows and treelines will be retained where possible. Where removal cannot be avoided, compensatory native hedgerow and tree planting will be provided within the landscape plan to maintain shelter, cover and foraging opportunities.
- Foraging habitat within the landscape plan: Some grassland foraging habitat used by red and amber-listed species will be lost. To offset this, meadow and open-space planting within the development will include native seed-bearing and invertebrate-supporting species. The project ecologist will review and approve all seed mixes to make sure they provide suitable foraging for these species.

Conclusion

This report aims to build on the baseline data and provide information to assist in assessing the potential impact of proposed developments at Tinahask on wintering birds within/over/adjacent to the development area. This report presents the methodology and results of 5 visits to this location by Altamar Ltd. from November 2024 to March 2025.

A total of 38 species were recorded within, above and immediately adjacent to the survey area across 5 surveys. Twenty-six green, ten amber and two red bird species of conservation concern in Ireland (BoCCI) were recorded either within, over and immediately adjacent to the survey area. Foraging was recorded on only a few occasions and in small numbers. No species was recorded in numbers approaching the 1% national or international thresholds.

The site is dominated by cattle-grazed and silage grassland enclosed by hedgerows, and is considered to be of low importance for wintering birds. The proposed development will result in the loss of some foraging habitat used by red- and amber-listed species. However, this loss is not considered significant, given the small numbers of birds recorded, the extent of similar grassland habitat in the surrounding rural landscape, and the proposed landscape plan, which will continue to provide foraging opportunities within the site. Any displacement is expected to occur at site level rather than local level.

Out of an abundance of caution, mitigation measures are recommended. These include retaining hedgerows and treelines where possible, providing compensatory planting where they are lost, and using seed mixes that support foraging by red- and amber-listed species. With these measures fully implemented, no significant impacts on wintering birds are predicted, including on the Qualifying Interests of nearby Special Protection Areas.

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Appendix IV. Wintering Bird Assessment 2025/2026



2025/2026 Wintering Bird Assessment at Tinahask Upper, Money Big, Money Little, Arklow, Co. Wicklow



6th October 2026

Prepared by: Gayle O'Farrell of Altemar Ltd.
On behalf of: Castlethorn Construction

Document Control Sheet			
Client	Castlethorn Construction		
Project	2025/2026 Wintering Bird Assessment at Tinahask Upper, Money Big, Money Little, Arklow, Co. Wicklow.		
Report	Wintering Bird Assessment		
Date	6 th October 2026		
Version	Author	Reviewed	Date
Final	Gayle O'Farrell	Bryan Deegan	6 th October 2026

Summary

Structure/features:	The site is predominantly agricultural fields and boundary hedgerows. There are no pre-existing structures within the proposed site.
Location:	Tinahask Upper, Money Big, Money Little, Arklow, Co. Wicklow
Bird species present:	Bullfinch, Buzzard, Blackbird, Black-headed Gull, Blue tit, Chaffinch, Coal tit, Cormorant, Dunnock, Goldfinch, Great Tit, Greenfinch, Heron, Herring Gull, Hooded Crow, House Sparrow, Jackdaw, Linnet, Long-tailed tit, Magpie, Meadow Pipit, Mistle thrush, Pheasant, Pied Wagtail, Redpoll, Robin, Rook, Snipe, Siskin, Skylark, Song Thrush, Starling, Woodpigeon, Wren.
Proposed work:	Large-scale Residential Development
Surveys by:	Emma Peters & Luke Dodebier of Altemar Ltd.
Survey dates:	24th October 2025, 30th October 2025, 13 th November 2025, 25 th November 2025, 2 nd December 2025, 12 th December 2025, 9 th January 2026, 11 th February 2026.



0 0.2 0.4 0.6 0.8 1 km

Project: Tinahask Upper, Arklow
 Location: Arklow, Co. Wicklow
 Date: 5th October 2026
 Drawn By: Bryan Deegan (Altamar)

ALTEMAR
 Marine & Environmental Consultancy

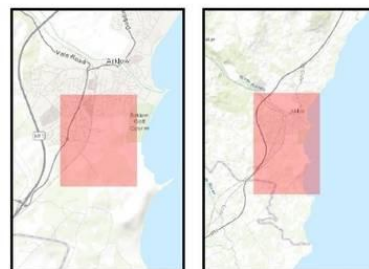


Figure 1. site outline and survey area

Competency of assessor

Since its inception in 2001, Altamar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/Semi-State Departments. Bryan Deegan, the managing director of Altamar, is an Environmental Scientist and Marine Biologist with 30 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently lead project ecologist for Project Pembroke and was contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds an MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and an NCEA National Certificate in Science (Aquaculture).

Legislative context

The Wildlife Act 1976 protects wild birds in Ireland. Based on this legislation it is an offence to wilfully interfere with or destroy wild birds and their nests and eggs (other than the wild species mentioned in the Third Schedule of this Act). Under this legislation it is an offence for any person who *"wilfully takes or removes the eggs or nest of a protected wild bird otherwise than under and in accordance with such a licence, wilfully destroys, injures or mutilates the eggs or nest of a protected wild bird, wilfully disturbs a protected wild bird on or near a nest containing eggs or unflown young."*

Habitats Directive- Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora has been transposed into Irish Law, including, via, *inter alia*, the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

Council Directive 2009/147/EC 2010 on the conservation of wild birds provides for the conservation of wild birds by, among other things, classifying important ornithological sites as Special Protection Areas. The Directive relates to the conservation of all species of naturally occurring birds in the wild state, their eggs, nests and habitats in the European territory of the Member States. The Directive prohibits in particular:

- deliberate killing or capture by any method;
- deliberate destruction of, or damage to, their nests and eggs or removal of their nests;
- taking their eggs in the wild and keeping these eggs even if empty;
- deliberate disturbance of these birds particularly during the period of breeding and rearing, in so far as disturbance would be significant having regard to the objectives of this Directive;
- keeping birds of species the hunting and capture of which is prohibited.

Under the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), notwithstanding any consent, statutory or otherwise, given to a person by a public authority or held by a person, except in accordance with a licence granted by the Minister under Regulation 54, a person who in respect of the species referred to in Part 1 of the First Schedule:

- deliberately captures or kills any specimen of these species in the wild,
- deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,
- deliberately takes or destroys eggs of those species from the wild,
- damages or destroys a breeding site or resting place of such an animal, or
- keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive, shall be guilty of an offence.

Wintering bird surveys

This report presents the methodology and results of 8 visits to Tinahask Upper by Emma Peters and Luke Dodebier between October 2025 and February 2026.

Survey methodology

Wintering bird surveys were carried out during the wintering bird season at Tinahask Upper in order to gather baseline data to assist in assessing the potential impacts on wintering birds from future proposed developments on the site, in particular those listed as Qualifying Interests of SPAs within 15 km and other amber/red-listed birds of conservation concern in Ireland (BoCCI). Potential impacts on wintering bird species include disturbance, destruction of foraging areas, destruction of roosting areas and collision risk during construction and operation (cranes, buildings etc.). These wintering bird surveys were carried out based on the BTO Common Bird Census (Bibby *et al.*, 2000 and Gilbert *et al.*, 1998) and I-WeBS Counter Manual: Guidelines for Irish Wetland Bird Survey counters (BWI & NPWS), following CIEEM guidelines.

A 15-minute settlement period was given following arrival to allow resumption of bird activity after any possible disturbance caused by arrival to the site. A roving transect survey around the perimeter was carried out on each occasion, providing clear views of all areas within and over that survey area. Flight lines, large flights, foraging, perching, bathing and any other observed behaviour by wintering bird species and other species observed within, over and immediately adjacent to the survey area were recorded. Each survey was carried out by a single surveyor. A pair of binoculars was used by the surveyor to identify and count birds at distance.

Care was taken not to double count any observations. Surveys were initiated at varying times (morning/midday/afternoon) to account for fluxes in bird activity and birds transiting to/from foraging and roosting areas. Local temperatures varied from 0 – 10°C. Winds varied from 2– 5 on the Beaufort scale. Weather conditions were favourable on all occasions.

Peak counts for the survey area were compared to 1% national and international population sizes of relevant species for which data was available. Foraging areas, flight paths, large flights and other observations were mapped according to field sheet records.

Survey results/discussion

Habitats of wintering bird potential

A desk and ground level wintering bird habitat assessment was carried out and used to examine the structures, features and vegetation on site that could provide wintering bird habitat. Potential features associated with foraging/roosting include agricultural fields, improved/amenity grassland, scrub, watercourses and drainage ditches. All open areas, vegetated areas, built areas and water-holding features within and immediately adjacent to the site were assessed for wintering bird potential.

The site comprises a series of fields dominated by grassland pasture, which are managed primarily for cattle grazing and silage production. The fields are generally enclosed by hedgerows, with more extensive and structurally developed hedgerows present through the central portion of the site and along the eastern boundary. These hedgerows provide additional opportunities for shelter, cover and foraging for wintering bird species, particularly species associated with farmland and hedgerow habitats. The relatively enclosed nature of the site and the absence of extensive areas of open arable ground limit its potential to support large aggregations of wintering waterbirds or farmland birds typically associated with open agricultural landscapes.

A small pond is located within the field at the south-eastern corner of the site. This feature provides a localised source of standing water and may provide limited opportunities for foraging and drinking by wintering bird species, although its relatively small size limits its potential to support significant numbers of wintering waterbirds.

Overall, the site provides low to moderate potential for wintering birds, primarily through its grassland fields, hedgerow network and small areas of standing water. The habitats present are considered more likely to support individual or small numbers of common and widespread farmland and garden-associated species rather than significant concentrations of wintering birds.



Wintering bird activity survey

A total of 34 species were recorded within, above and immediately adjacent to the survey area across 8 surveys. Twenty-four green, eight amber and two red bird species of conservation concern in Ireland (BoCCI) were recorded either within, over and immediately adjacent to the survey area. Details regarding the status, behaviour and abundances of species recorded on/over/adjacent to the site relevant to the conservation interests of Special Protection Areas (SPAs) and red listed BoCCI are discussed below.

Meadow pipit (red BoCCI) was observed during three surveys, perched on all occasions. This species was concentrated in the southern portion of the survey area, outside the site boundary. Peak count was 2 individuals.

Black-headed Gull (amber BoCCI) – was observed on two occasions during surveys. One flight path was recorded over the site. Black-headed gulls were noted foraging on site on one occasion, 3 within the central portion of the site. Peak count of this species was 3.

Herring Gull (amber BoCCI) – was observed across all 8 surveys. 17 observations were made of herring gull with most of the observations of them flying over the survey area. They were recorded foraging on two occasions in the central portion of the site. Peak count was 13 individuals.

Cormorant (amber BoCCI) - Cormorant was recorded on two occasions during the wintering bird surveys, with both records relating to a single individual transiting over the central portion of the site. The peak count was one individual. No cormorants were observed foraging, roosting or otherwise utilising habitats within the site.

Snipe (red BoCCI) – Snipe were recorded on eight occasions across six wintering bird surveys. All records related to birds flushed from the grassland within the survey area. The maximum number of individuals recorded on any single survey was two. The repeated presence of snipe indicates that the site is used periodically by the species during the winter period, although the low numbers recorded and the absence of observed feeding activity suggest that the site is not of particular importance for supporting larger numbers of wintering snipe.

Table 1. Species recorded within, above and/or immediately adjacent to the survey

Common name	BTO	Latin name	BoCCI
Buzzard	BZ	<i>Buteo buteo</i>	Green
Blackbird	B.	<i>Turdus merula</i>	Green
Black-headed Gull	BH.	<i>Chroicocephalus ridibundus</i>	Amber
Blue tit	BT	<i>Cyanistes caeruleus</i>	Green
Bullfinch	BF	<i>Pyrrhula pyrrhula</i>	Green
Chaffinch	CH	<i>Fringilla coelebs</i>	Green
Coal tit	CT	<i>Parus ater</i>	Green
Cormorant	CA	<i>Phalacrocorax carbo</i>	Amber
Dunnock	D.	<i>Prunella modularis</i>	Green
Goldfinch	GO	<i>Carduelis carduelis</i>	Green
Great Tit	GT	<i>Parus major</i>	Green
Greenfinch	GR	<i>Chloris chloris</i>	Amber
Heron	H.	<i>Ardea cinerea</i>	Green
Herring Gull	HG	<i>Larus argentatus</i>	Amber
Hooded Crow	HC	<i>Corvus cornix</i>	Green
House Sparrow	HS	<i>Passer domesticus</i>	Amber
Jackdaw	JD	<i>Corvus monedula</i>	Green
Linnet	LI	<i>Linaria cannabina</i>	Amber
Long-tailed tit	LT	<i>Aegithalos caudatus</i>	Green

Magpie	MG	<i>Pica pica</i>	Green
Meadow Pipit	MP	<i>Anthus pratensis</i>	Red
Mistle thrush	M.	<i>Turdus viscivorus</i>	Green
Pheasant	PH	<i>Phasianus colchicus</i>	Green
Pied Wagtail	PW	<i>Motacilla alba yarrellii</i>	Green
Redpoll (Lesser)	LR	<i>Acanthis cabaret</i>	Green
Robin	R.	<i>Erithacus rubecula</i>	Green
Rook	RO	<i>Corvus frugilegus</i>	Green
Siskin	SK	<i>Spinus spinus</i>	Green
Skylark	S.	<i>Alauda arvensis</i>	Amber
Snipe	SN	<i>Gallinago gallinago</i>	Red
Song Thrush	ST	<i>Turdus philomelos</i>	Green
Starling	SG	<i>Sturnus vulgaris</i>	Amber
Woodpigeon	WP	<i>Columba palumbus</i>	Green
Wren	WR	<i>Troglodytes troglodytes</i>	Green

Table 2. Peak counts of bird species recorded within, above and/or immediately adjacent to the survey area.

Species	Peak count (2025/2026)	1% national	1% international
Buzzard	1		
Blackbird	8		
Black-headed Gull	3		>10,000
Blue tit	6		
Bullfinch	1		
Chaffinch	7		
Coal tit	2		
Cormorant	1	110	>1,200
Dunnoek	9		
Goldfinch	32		
Great Tit	4		
Greenfinch	3		
Grey Heron	1	25	5,000
Herring Gull	13		>100,000
Hooded Crow	17		
House Sparrow	4		
Jackdaw	24		
Linnet	56		
Long-tailed tit	6		
Magpie	16		
Meadow Pipit	2		
Mistle thrush	1		
Pheasant	2		
Pied Wagtail	2		
Redpoll (Lesser)	1		
Robin	12		
Rook	14		
Siskin	3		

Skylark	17		
Snipe	2		>10,000
Song Thrush	4		
Starling	62		
Woodpigeon	36		
Wren	16		

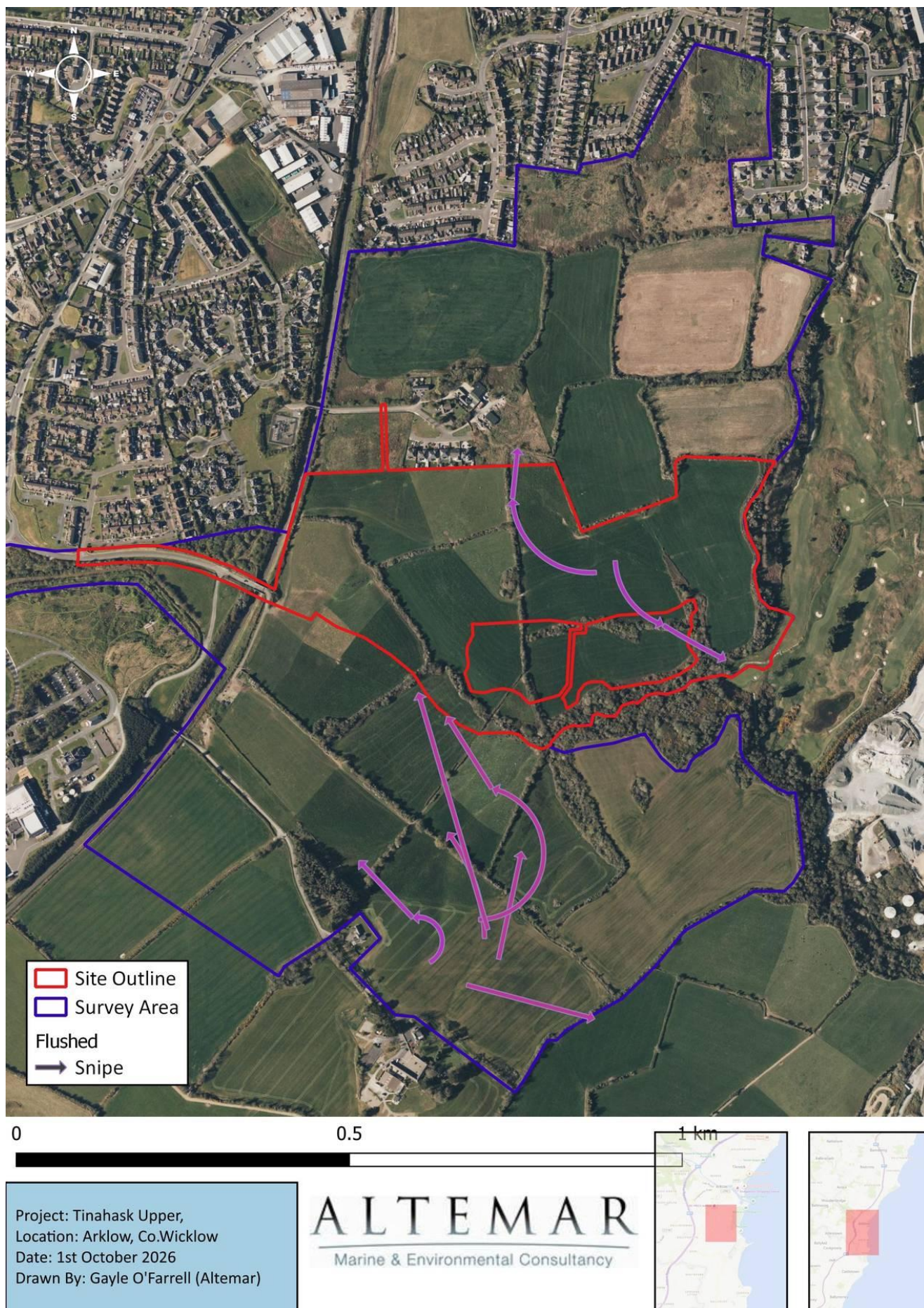


Figure 3. Map demonstrating observations of snipe on site.



Figure 4. Map demonstrating observations of cormorant on site.



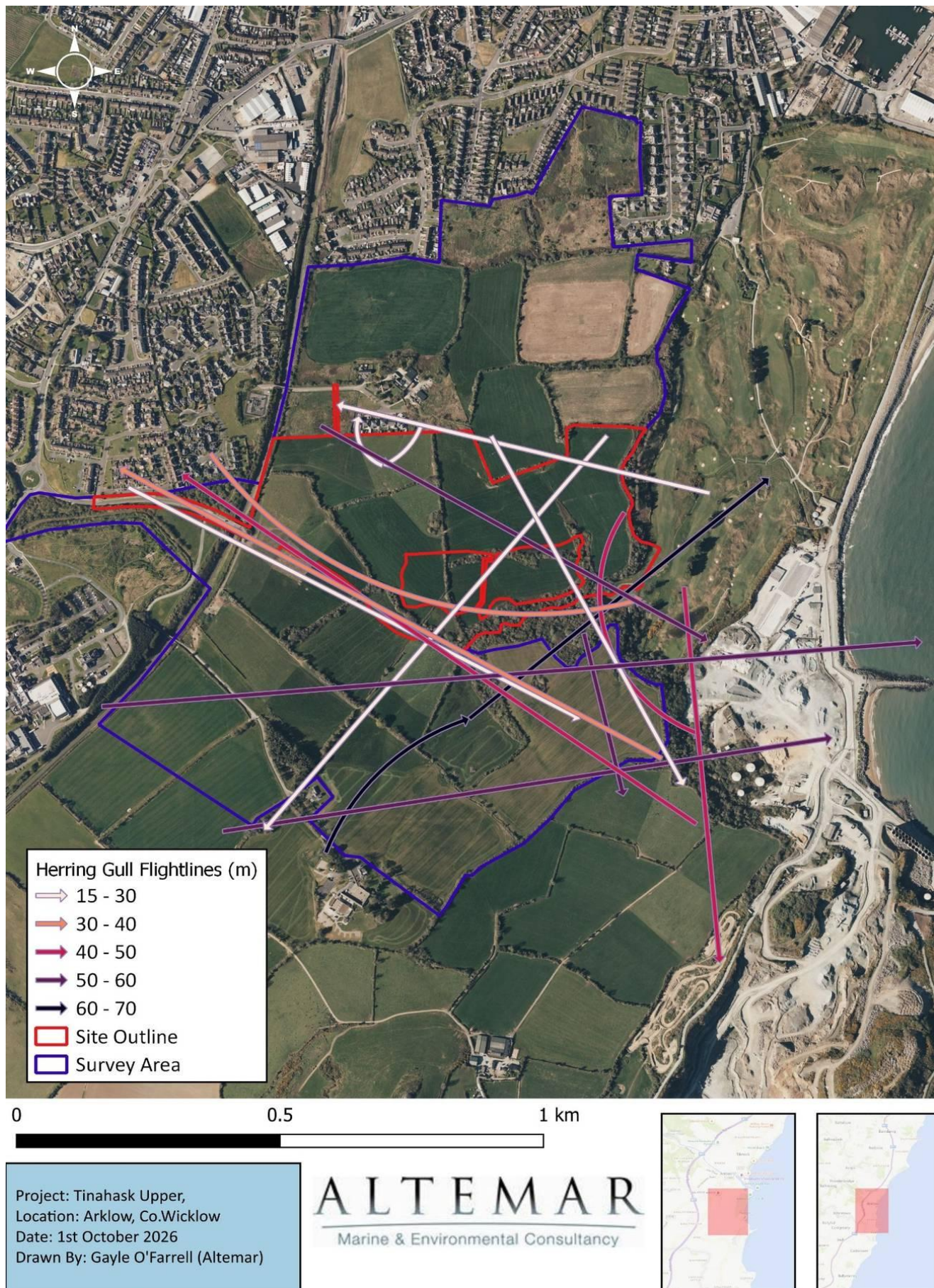


Figure 6. Map demonstrating Herring Gull (HG) flightlines on site.



Figure 7. Map demonstrating Meadow Pipit perched on site.

Wintering bird assessment findings

Review of local bird records

The review of existing bird records (sourced from NBDC Database) within a 2 km² grid (Reference grids T27K) encompassing the study area reveals that 53 known bird species have previously been observed and recorded locally (Table 3).

Table 3: NBDC bird records within 2 km² (grids T27K)

Species name	Date of last record	Title of dataset	Designation
Blackbird (<i>Turdus merula</i>)	27/05/2024	Birds of Ireland	
Black-headed Gull (<i>Chroicocephalus ridibundus</i>)	07/10/2020	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Blue Tit (<i>Cyanistes caeruleus</i>)	23/07/2017	Birds of Ireland	
Bullfinch (<i>Pyrrhula pyrrhula</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Buzzard (<i>Buteo buteo</i>)	23/04/2023	Birds of Ireland	
Chaffinch (<i>Fringilla coelebs</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Chiffchaff (<i>Phylloscopus collybita</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	
Coal Tit (<i>Periparus ater</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Collared Dove (<i>Streptopelia decaocto</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Common Gull (<i>Larus canus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Cormorant (<i>Phalacrocorax carbo</i>)	07/10/2020	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Curlew (Numenius arquata)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Dunnock (<i>Prunella modularis</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Fulmar (<i>Fulmarus glacialis</i>)	25/05/2019	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Gannet (<i>Morus bassanus</i>)	06/06/2017	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List

Species name	Date of last record	Title of dataset	Designation
Goldcrest (Regulus regulus)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Goldfinch (Carduelis carduelis)	07/10/2020	Birds of Ireland	
Great Black-backed Gull (Larus marinus)	27/05/2024	Birds of Ireland	
Great Tit (Parus major)	27/05/2024	Birds of Ireland	
Greenfinch (Chloris chloris)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Grey Wagtail (Motacilla cinerea)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Herring Gull (Larus argentatus)	31/12/2011	Bird Atlas 2007 - 2011	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Hooded Crow (Corvus cornix)	27/05/2024	Birds of Ireland	
House Martin (Delichon urbicum)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
House Sparrow (Passer domesticus)	31/12/2011	Bird Atlas 2007 - 2011	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Jackdaw (Coloeus monedula)	27/05/2024	Birds of Ireland	
Linnet (Linaria cannabina)	27/05/2024	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Magpie (Pica pica)	31/12/2011	Bird Atlas 2007 - 2011	
Meadow Pipit (Anthus pratensis)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Mistle Thrush (Turdus viscivorus)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts
Oystercatcher (Haematopus ostralegus)	07/10/2020	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Peregrine (Falco peregrinus)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species

Species name	Date of last record	Title of dataset	Designation
Pheasant (<i>Phasianus colchicus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
Pied Wagtail (<i>Motacilla alba</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Raven (<i>Corvus corax</i>)	27/05/2024	Birds of Ireland	
Red-throated Diver (<i>Gavia stellata</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex I Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Redwing (<i>Turdus iliacus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Reed Bunting (<i>Emberiza schoeniclus</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	
Ringed Plover (<i>Charadrius hiaticula</i>)	25/05/2019	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Robin (<i>Erithacus rubecula</i>)	27/05/2024	Birds of Ireland	Protected Species: Wildlife Acts
Rock Pipit (<i>Anthus petrosus</i>)	27/05/2024	Birds of Ireland	
Rook (<i>Corvus frugilegus</i>)	27/05/2024	Birds of Ireland	
Sand Martin (<i>Riparia riparia</i>)	12/09/2018	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Sedge Warbler (<i>Acrocephalus schoenobaenus</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	
Skylark (<i>Alauda arvensis</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Song Thrush (<i>Turdus philomelos</i>)	31/12/2011	Bird Atlas 2007 - 2011	
Starling (<i>Sturnus vulgaris</i>)	31/12/2011	Bird Atlas 2007 - 2011	Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Stonechat (<i>Saxicola rubicola</i>)	27/05/2024	Birds of Ireland	Protected Species: Wildlife Acts

Species name	Date of last record	Title of dataset	Designation
Swallow (<i>Hirundo rustica</i>)	27/05/2024	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Swift (<i>Apus apus</i>)	31/07/1991	The Second Atlas of Breeding Birds in Britain and Ireland: 1988-1991	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
Willow Warbler (<i>Phylloscopus trochilus</i>)	31/12/2011	Bird Atlas 2007 - 2011	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Woodpigeon (<i>Columba palumbus</i>)	27/05/2024	Birds of Ireland	
Wren (<i>Troglodytes troglodytes</i>)	31/12/2011	Bird Atlas 2007 - 2011	

I-WeBS

I-WeBS National and Site Trends Report 1994/95 – 2019/20 report presents national and site-specific trends of wetland birds in Ireland. The nearest I-Webs sites are Avoca River/Arklow (OT399) and Arklow Ponds (OT002) (c. 1.2km). The proposed development site is not considered to be of relevance to any i-webs site. The national trends report is shown in Figure 8.

National Summary

Species	Trend (%)			Long Term Trend
	National - 5 Year	National - 12 Year	National - 23 Year	
Scalp	-33.6	-82.9	-89.2	Large Decline
Pochard	-19.8	-60.4	-79.1	Large Decline
Goldeneye	-32.5	-39.0	-66.9	Large Decline
Lapwing	-6.5	-45.1	-63.9	Large Decline
Gray Plover	-30.6	-39.4	-57.8	Large Decline
Golden Plover	-16.9	-58.1	-54.1	Large Decline
Dunlin	5.9	-21.2	-45.2	Moderate Decline
Curlew	-9.4	-23.7	-43.1	Moderate Decline
Turnstone	-33.6	-46.0	-23.7	Intermediate Decline
Coot	-10.1	1.1	-23.2	Intermediate Decline
Mallard	-11.3	-19.7	-19.1	Intermediate Decline
Wigeon	0.9	-17.0	-18.2	Intermediate Decline
Tufted Duck	-20.7	-28.9	-17.9	Intermediate Decline
Red-breasted Merganser	-12.9	5.2	-14.7	Intermediate Decline
Pintail	-0.8	-6.0	-13.7	Intermediate Decline
Great Crested Grebe	-39.5	-6.1	-10.8	Intermediate Decline
Shoveler	23.0	-21.3	-10.8	Intermediate Decline
Knot	0.0	-12.2	-9.8	Intermediate Decline
Bar-tailed Godwit	-32.6	-13.9	-5.1	Intermediate Decline
Ringed Plover	-4.3	-26.8	-1.1	Intermediate Decline
Gray Heron	1.0	-4.9	6.6	Stable or Increasing
Redshank	-14.0	-28.4	6.7	Stable or Increasing
Shelduck	6.3	-0.8	9.3	Stable or Increasing
Oystercatcher	-17.5	-31.1	10.8	Stable or Increasing
Mute Swan	4.6	9.6	13.8	Stable or Increasing
Teal	1.8	5.7	19.4	Stable or Increasing
Purple Sandpiper	-36.4	-37.6	23.5	Stable or Increasing
Godwall	-26.5	4.3	24.4	Stable or Increasing
Little Grebe	6.1	16.7	38.2	Stable or Increasing
Greenshank	0.9	7.3	41.0	Stable or Increasing
Cormorant	38.5	8.4	42.9	Stable or Increasing
Sanderling	-23.8	-11.1	84.6	Stable or Increasing
Black-tailed Godwit	22.5	25.0	92.3	Stable or Increasing
Light-bellied Brant Goose	-11.2	1.2	93.3	Stable or Increasing
Little Egret	34.6	61.5	483.3	Stable or Increasing

Figure 8. I-WeBS National Trends Report.

Mitigation

The proposed site is of low importance to the local wintering bird population. There is the potential for negative impacts by loss of foraging habitat and during construction phase through collision risks to species transiting to and from foraging and roosting areas. Out of an abundance of caution, the following mitigation measures relevant to birds should be implemented to minimise any potential negative impact on biodiversity:

- Retention of hedgerows and treelines: Hedgerows and treelines will be retained where possible. Where removal cannot be avoided, compensatory native hedgerow and tree planting will be provided within the landscape plan to maintain shelter, cover and foraging opportunities.
- Foraging habitat within the landscape plan: Some grassland foraging habitat used by red and amber-listed species will be lost. To offset this, meadow and open-space planting within the development will include native seed-bearing and invertebrate-supporting species. The project ecologist will review and approve all seed mixes to make sure they provide suitable foraging for these species.

Conclusion

This report aims to build on the baseline data and provide information to assist in assessing the potential impact of proposed developments at Tinahask on wintering birds within/over/adjacent to the development area. This report presents the methodology and results of 8 visits to this location by Altamar Ltd. from October 2025 to February 2026.

A total of 34 species were recorded within, above and adjacent to the survey area across eight surveys. Twenty-four green, eight amber and two red species of conservation concern were recorded either within, over or immediately adjacent to the survey area boundary. Two red-listed species of conservation concern in Ireland, meadow pipit (*Anthus pratensis*) and snipe (*Gallinago gallinago*) were recorded within and adjacent to the site outline/survey area. Foraging was recorded on only a few occasions and in small numbers. No species was recorded in numbers approaching the 1% national or international thresholds.

The site is dominated by cattle-grazed and silage grassland enclosed by hedgerows, and is considered to be of low importance for wintering birds. The proposed development will result in the loss of some foraging habitat used by red- and amber-listed species. However, this loss is not considered significant, given the small numbers of birds recorded, the extent of similar grassland habitat in the surrounding rural landscape, and the proposed landscape plan, which will continue to provide foraging opportunities within the site. Any displacement is expected to occur at site level rather than local level.

Out of an abundance of caution, mitigation measures are recommended. These include retaining hedgerows and treelines where possible, providing compensatory planting where they are lost, and using seed mixes that support foraging by red- and amber-listed species. With these measures fully implemented, no significant impacts on wintering birds are predicted, including on the Qualifying Interests of nearby Special Protection Areas.

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