



REMEDIAL NATURA IMPACT STATEMENT

FOR

SUBSTITUTE CONSENT FOR
DEVELOPMENT

AT


MOUNT USHER VIEW, ASHFORD,
CO. WICKLOW


ON BEHALF OF

Vartry Developments Ltd.

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1 INTRODUCTION

1.1 Background

Enviroguide Consulting was commissioned by Vartry Developments Ltd. to prepare a remedial Appropriate Assessment Screening Report and subsequently a remedial Natura Impact Statement for a Development at Mount Usher View, Ashford, Co. Wicklow. This application is made on foot of a grant of leave to apply for substitute consent under ref. ABP-309566-21. The application site occurs over the majority of the front of a 1.19 ha. site for which planning permission was granted and taken up under Reg. Ref. 081704 (extended under Reg. Ref. 14118) for a mixed use residential, retail and office development consisting of 24 no. residential units (20 no. 3 bed terraced houses above either retail or office space and 4 no. 4 bed semi-detached houses) in 5 no. blocks.

1.2 Legislative Context

Member States are required to designate Special Areas of Conservation (SACs) and Special Protected Areas (SPAs) under the EU Habitats and Birds Directives, respectively. SACs and SPAs are collectively known as Natura 2000 sites. An 'Appropriate Assessment' (AA) is a required assessment to determine the likelihood of significant impacts, based on best scientific knowledge, of any plans or projects on Natura 2000 sites.

The Habitats Directive (92/43/EEC) seeks to conserve natural habitats and wild fauna and flora by the designation of SACs and the Birds Directive (2009/147/EC) seeks to protect birds of special importance by the designation of SPAs. It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community.

An Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a Natura 2000 site. Paragraph 3 states that:

“6(3) Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site, in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

These obligations in relation to Appropriate Assessment have been implemented in Ireland under Part XAB of the Planning and Development Act 2000, as amended (“the 2000 Act”), and in particular Section 177U and Section 177V thereof. The relevant provisions of Section 177U in relation to AA screening have been set out below:

“177U.— (1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development,

individually or in combination with another plan or project is likely to have a significant effect on the European site.

(2)...

(3)...

(4) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is required if it cannot be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

(5) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is not required if it can be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.”

The obligations in relation to Substitute Consent have been implemented in Ireland under Part XA of the Planning and Development Act 2000, as amended (“the 2000 Act”). The relevant provisions of Section 177G in relation to remedial Natura Impact Statement are set out below:

177G. — (1) *A remedial Natura impact statement shall contain the following:*

(a) a statement of the significant effects, if any, on the relevant European site which have occurred or which are occurring or which can reasonably be expected to occur because the development the subject of the application for substitute consent was carried out;

(b) details of —

(i) any appropriate remedial or mitigation measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy or mitigate any significant effects on the environment or on the European site;

(ii) the period of time within which any such proposed remedial or mitigation measures shall be carried out by or on behalf of the applicant;

(c) such information as may be prescribed under section 177N;

(d) and may have appended to it, where relevant, and where the applicant may wish to rely upon same:

(i) a statement of imperative reasons of overriding public interest;

(ii) any compensatory measures being proposed by the applicant.

1.3 Stages of AA

The AA process is a four-stage process, with issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

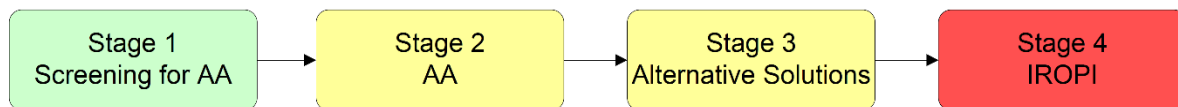


FIGURE 1. THE FOUR STAGES OF THE APPROPRIATE ASSESSMENT PROCESS (DEHLG, 2010 REVISION).

The four stages of an AA can be summarised as follows:

- Stage 1: *Screening*. The first stage of the AA process is to determine the likelihood of significant impacts of this proposal.
- **Stage 2: *Natura Impact Statement (NIS)***. The second stage of the AA process assesses the impact of the proposal (either alone or in combination with other projects or plans) on the integrity of the Natura 2000 site, with respect to the conservation objectives of the site and its ecological structure and function. A Natura Impact Statement containing a professional, scientific examination of the proposal is required and includes any mitigation measure to avoid, reduce or offset negative impacts.
- Stage 3: *Assessment of alternative solutions*. If the outcome of Stage 2 is negative, i.e. adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- Stage 4: *Assessment where no alternative solutions exist and where adverse impacts remain*. The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a Natura 2000 site, where no less damaging solution exists.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. First the project should aim to avoid any negative impacts on European sites by identifying possible impacts early in the planning stage and designing the project to avoid such impacts. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the project is still likely to result in adverse effects, and no further practicable mitigation is possible, a refusal for planning permission may be recommended. In this case, the project will generally only be considered where no alternative solutions are identified and the project is required for imperative reasons of overriding public interest (IROPI test), or, in the case of priority habitats, considerations of health or safety, or beneficial consequences of primary importance for the environment or to other imperative reasons of overriding public interest. Then compensation measures are required for any remaining adverse effects.

1.4 Guidance

This remedial NIS has been undertaken in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities*. (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities*. Circular NPW 1/10 & PSSP 2/10;

- *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* (European Commission, 2001);
- *Communication from the Commission on the precautionary principle* (European Commission, 2000); and,
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019).

2 DESCRIPTION OF THE PROJECT

2.1 Site Location

The Development Site, as seen in Figure 2, is 1.19 ha and is located within Ashford town, along Main Street (R772), and almost 700m west of the M11. The Site is bounded on the east by the R772, on the south and west by residential dwellings, and on the north by a commercial unit. The immediate surrounding landscape is urban in nature, with the wider environment consisting of agricultural lands.

2.2 Description of the Development

This application is made on foot of a grant of leave to make substitute consent under ref. ABP-309566-21. The application site occurs over a 1.19 ha. site for which planning permission was granted and taken up under Reg. Ref. 081704 (extended under Reg. Ref. 14118) for a mixed use residential, retail and office development consisting of: 24 no. residential units (20 no. 3 bed terraced houses above either retail or office space and 4 no. 4 bed semi-detached houses) in 5 no. blocks; vehicular access from two points on the northern and southern corners of the site from Mount Alto Road (L1096); and all ancillary site development works including the installation of a new surface water sewer which outflows to the Vartry River. Development under Reg. Ref. 081704 was not completed.

Development for which substitute consent is sought consists of the development that is complete and was permitted under Reg. Ref. 081704. Development is currently progressed over the majority of the site as follows:

- Blocks A & B consisting of 9 no. 2.5 storey terraced houses with retail (total 528 sqm below) to pad or first floor plate level;
- Blocks C and D consisting of 11 no. 3 storey terraced houses with ground floor offices are complete;
- and Block E consisting of 4 no. 2.5 storey semi-detached houses is complete for 2 no. houses to roof level but not weather tight.

According to the Wicklow County Council planning applications web page, three commencement notices for development were issued, with the intention to commence development on the following dates:

- Commencement: July 2015 – (proposed) end-date: November 2016

- Commencement: January 2016 – (proposed) end-date: November 2016

2.3 Existing Environment

2.3.1 *Geology, Hydrology and Hydrogeology*

The Site of the Development is within the *Avoca-Vartry* catchment and *Vartry_SC_010* sub-catchment. The closest watercourse to the Site is the River Vartry approximately 127m east, which flows into Broad Lough Estuary and then enters Wicklow Harbour. The status of the River Vartry was designated as Q 3-4 (Moderate Status) in 2009. At present (2020), the status of the River Vartry is *Good* (station code: RS10V010300). The Vartry is a Designated Salmonid Water under S.I. No. 293/1988 - European Communities (Quality of Salmonid Waters) Regulations 1988.

The Site is situated on the Wicklow groundwater body, which is presently *Not at Risk* of not meeting its WFD objectives. The aquifer type within the Site boundary is a *Locally Important Aquifer* (LI) on bedrock which is *Moderately Productive only in Local Zones*. The groundwater rock units underlying the aquifer are classified as *Ordovician Metasediments* (GSI, 2021). The level of vulnerability of the Site to groundwater contamination via human activities includes *High* and *Extreme*, with *Rock at or near surface*. The soil is classified as *Urban* and *Clonroche* (Fine loamy drift with siliceous stones) and the subsoil is man-made (*Made*), sandstone and shale till (Lower Paleozoic) (*TLPSsS*) and bedrock at surface (*Rck*) (EPA, 2021).

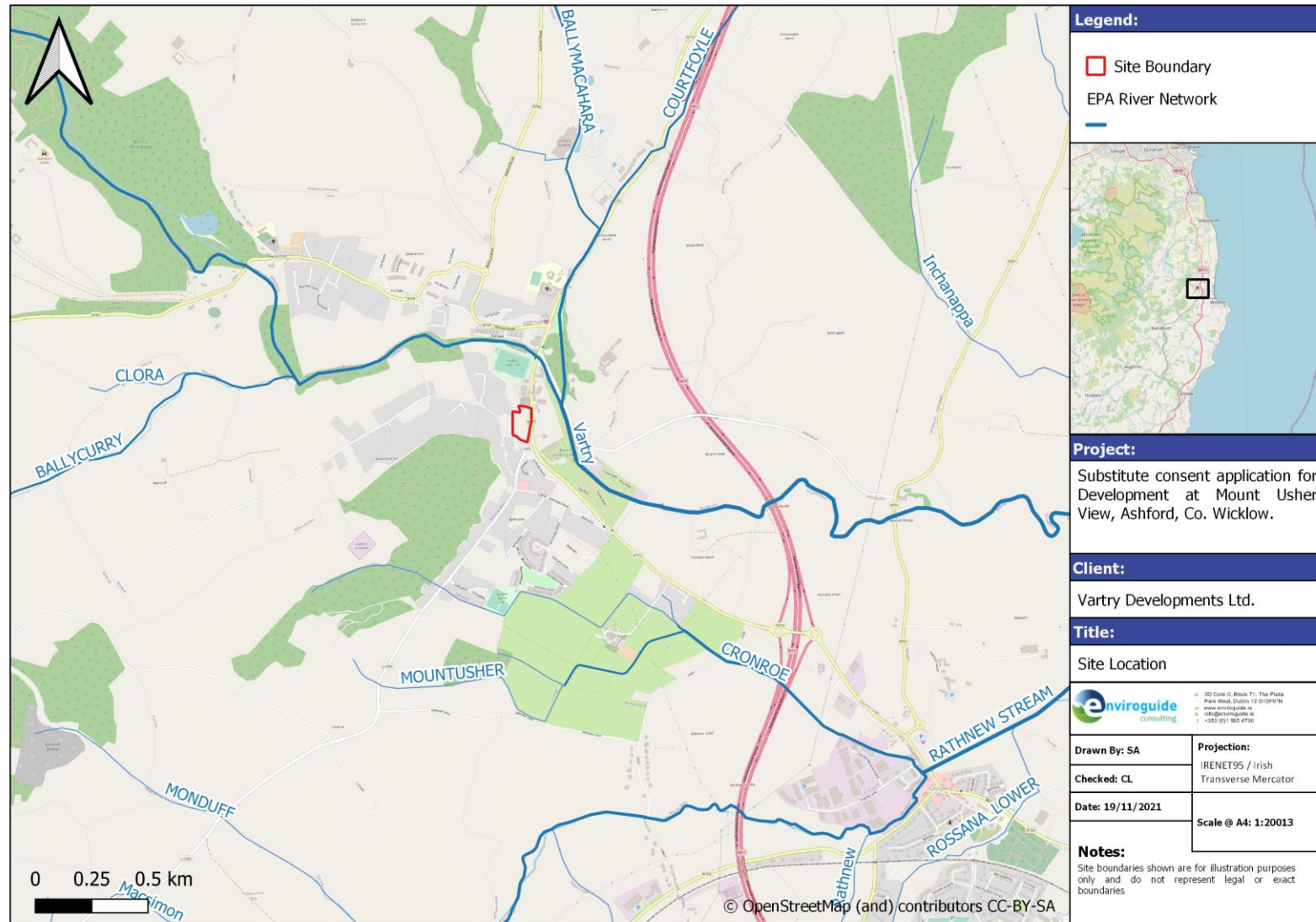


Figure 2. Site location.

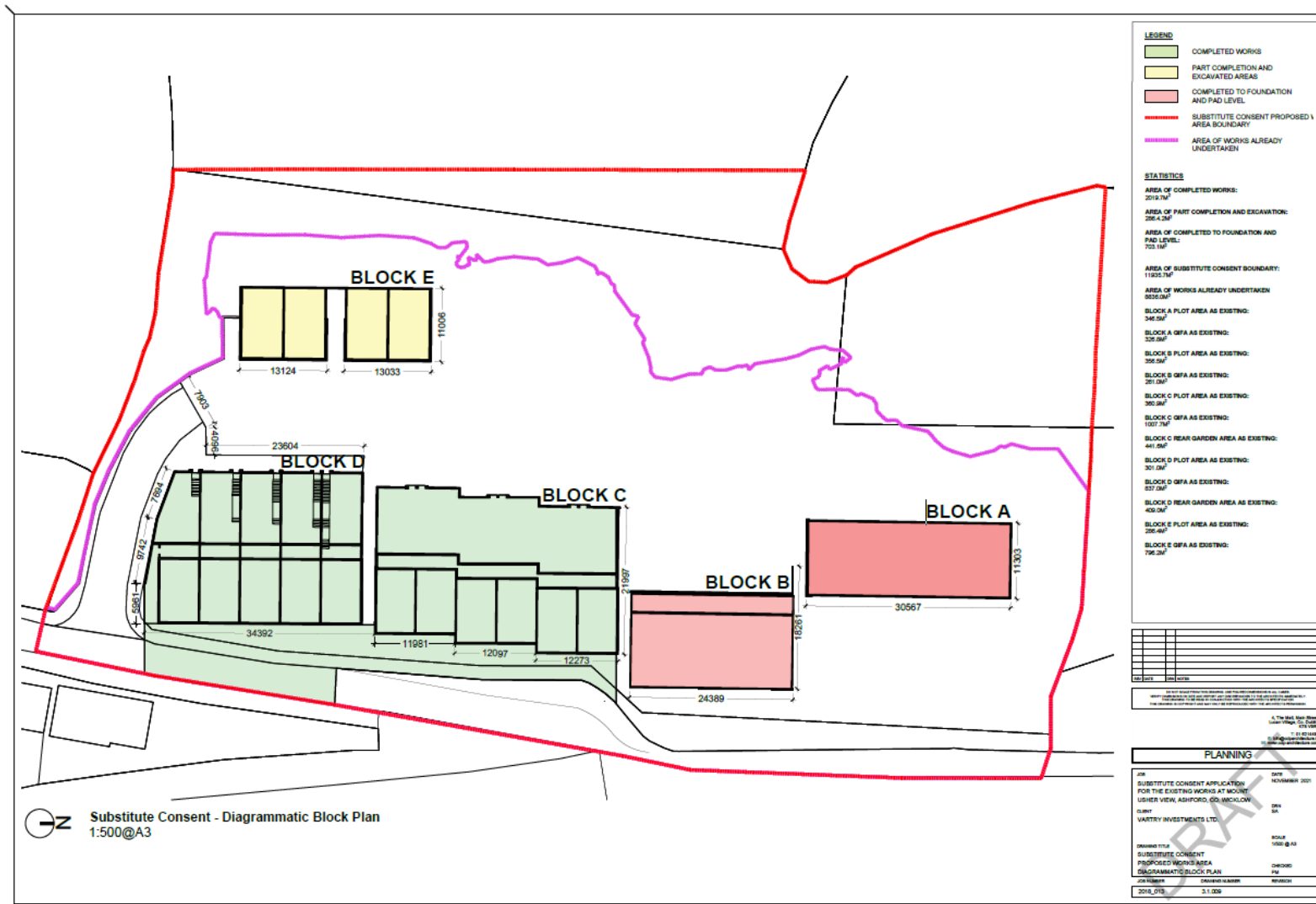


Figure 3. Proposed Site layout.

3 STAGE 1: APPROPRIATE ASSESSMENT SCREENING

3.1 Identification of Relevant Natura 2000 Sites

A remedial Appropriate Assessment (AA) Screening Report was prepared for the Development by Enviroguide Consulting.

It is noted in the remedial AA Screening Report that the Development Site is located outside the Natura 2000 network, c. 4 km upstream of The Murrough SPA and The Murrough Wetlands SAC. None of the qualifying interests of the SAC or SPA occur within the Development Site. There is therefore no potential for direct construction phase or operational phase impacts to arise which could affect the conservation objectives of these European sites.

However, the remedial AA Screening report concluded that indirect impacts on European sites could not be ruled out, and as such the Development requires a remedial Appropriate Assessment (remedial Natura Impact Statement - rNIS). Stage II of the AA process is required due to the identification of potential pathways for significant effects via surface water discharges.

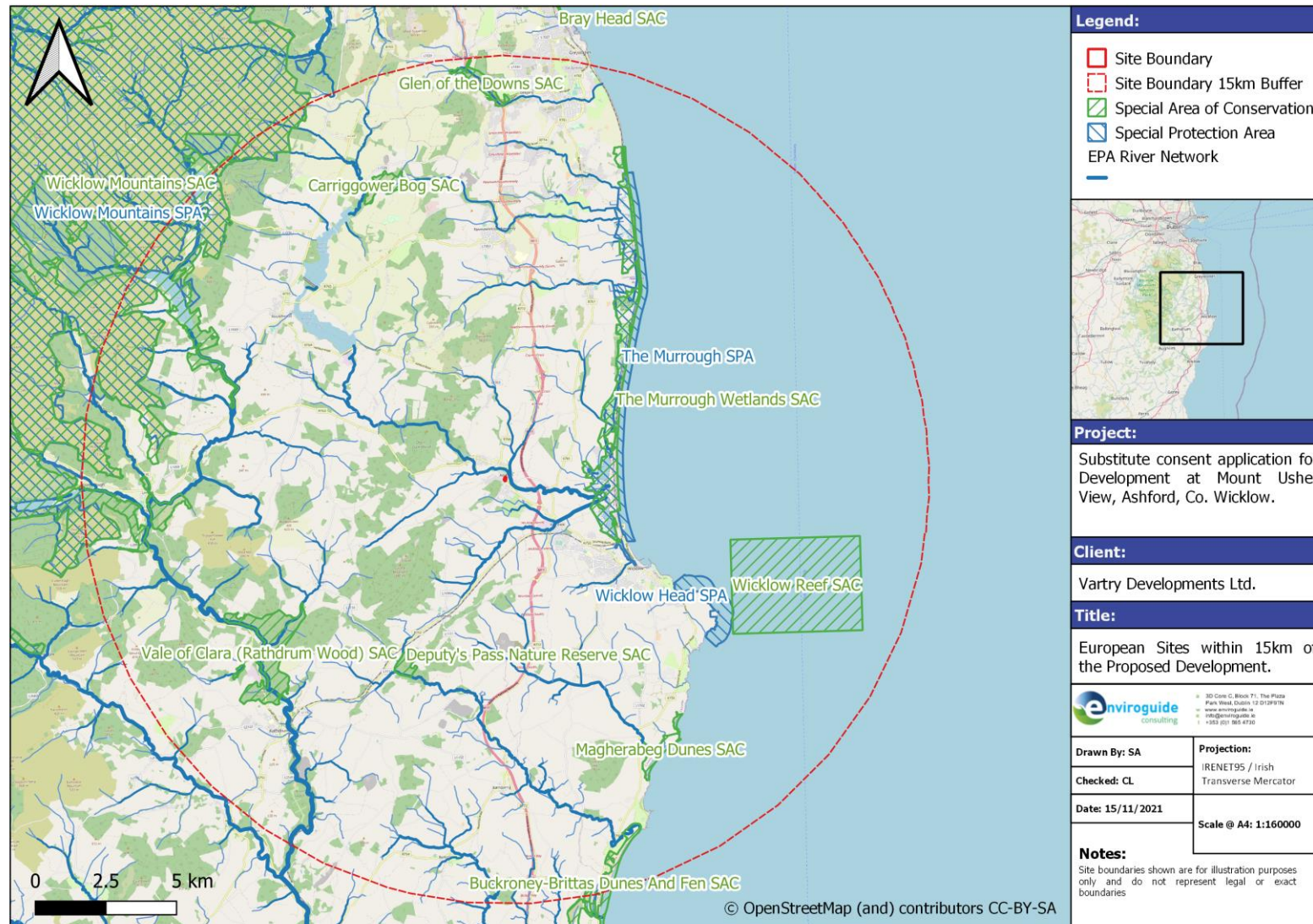


Figure 4. Natura 2000 sites within 15km of the Development Site.

3.2 Conclusion of Stage 1 Screening Assessment

The conclusion of the Stage 1 Screening Assessment is presented below:

The Development at Mount Usher View, Ashford, Co. Wicklow has been assessed taking into account:

- *the nature, size and location of the works and possible impacts arising from the construction works.*
- *the qualifying interests and conservation objectives of the European Sites*
- *the potential for in-combination effects arising from other plans and projects.*

*In conclusion, upon the examination, analysis and evaluation of the relevant information and applying the precautionary principle, it is concluded by the authors of this report that, on the basis of objective information; the possibility **may be excluded** that the Development will have a significant effect on any of the European Sites listed below:*

Deputy's Pass Nature Reserve SAC (000717)

Wicklow Reef SAC (002274)

Vale of Clara (Rathdrum Wood) SAC (000733)

Wicklow Mountains SAC (002122)

Magherabeg Dunes SAC (001766)

Carriggower Bog SAC (000716)

Buckroneys-Brittias Dunes And Fen SAC (000729)

Glen of the Downs SAC (000719)

Wicklow Head SPA (004127)

Wicklow Mountains SPA (004040)

However, upon examination of the relevant information including in particular the nature of the Development and the likelihood of significant effects on European Sites, the possibility may not be excluded that the Development will have a likely significant effect on the European Sites listed below:

The Murrough Wetlands SAC (002249)

The Murrough SPA (004186)

These European sites are assessed further as part of this rNIS.

4 METHODOLOGY

4.1 Desk Study

A desktop study was carried out to collate and review available information, datasets and documentation sources relevant for the completion of the Natura Impact Statement. The desktop study, completed in November 2021, relied on the following sources:

- Information on the network of Natura 2000 sites, relevant boundaries, qualifying interests and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at www.npws.ie;
- Information on the status of EU protected habitats and species in Ireland, obtained from the NPWS Article 17 reports;
- Text summaries of the relevant Natura 2000 sites taken from the respective Standard Data Forms and Site Synopses for each site, available at www.npws.ie
- Information on species records and distributions, obtained from the National Biodiversity Data Centre (NBDC) at www.maps.biodiversityireland.ie;
- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at www.gis.epa.ie;
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at www.gsi.ie;
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Bing and Ordnance Survey Ireland;
- Information on the extent, nature and location of the Development, provided by the applicant and their design team.

A comprehensive list of all the specific documents and information sources consulted in the completion of this report is provided in Section 10, References.

4.2 Field Surveys

Field surveys were not carried out for this rNIS.

4.3 Stage 2 AA Methodology

For Stage 2 AA, the potential for a development, individually or in combination with other plans or projects, to adversely affect the integrity of European sites must be examined with respect to the specific conservation objectives of the relevant European sites. Stage 2 AA must provide a clear conclusion regarding the absence of adverse effects on the integrity of European sites. In order to grant permission, the competent authority must conclude, having conducted the Stage 2 AA that the proposed scheme will not have an adverse effect on the integrity of any identified European sites.

The potential for significant effects arising from the Development on the integrity of **The Murrough Wetlands SAC** and **The Murrough SPA**, in light of their conservation objectives, is examined in Section 5 below. This sets the scope for the Stage 2 AA.

5 SUMMARY OF RELEVANT EUROPEAN SITES

The following summaries are extracted from the Standard Natura 2000 Data Forms.

5.1 The Murrough Wetlands SAC [002249]

The site comprises a series of coastal habitats and brackish to freshwater marshes, stretching for about 15km. Drainage directly to the sea is impeded along most of the site by a shingle ridge along which runs a railway line. There are two main outlets to the sea and there is seepage into the marshes under the shingle ridge and where breaches occur. Freshwater drains into the site via the Vartry River and many drains. Freshwater springs provide a permanent source of water for a complex fen system. Other habitats present on the site include salt marsh, tidal reed bed, freshwater reed swamp, wet grassland, wet woodland, mudflat, dry heath and dry grassland. Parts of the site are farmed.

This is the most extensive series of wetland habitats on the east coast, with six Annex I habitats occurring. Formerly the area of wetland was more extensive but the integrity of the site has been diminished through drainage, agricultural improvement and levelling of sand hills. The railway line has influenced the development of the entire system. It is an important site for winter wildfowl and supports internationally important numbers of *Branta bernicla hrota* as well as nationally important numbers of several species. *Sterna albifrons* (Annex I Birds Directive) breeds in the site. Many other Annex I species are also present. The site is also of importance for the populations of rare invertebrate and plant species that it supports.

5.2 The Murrough SPA [004186]

The Murrough SPA comprises a coastal wetland complex that stretches for 13 km from Kilcoole Station, east of Kilcoole village in the north, to Wicklow town in the south, and extends inland for up to 1 km. The site includes area of marine water to a distance of 200 m from low water mark. There is a railway on top of the beach and much agricultural reclamation of the marshes/saltmarshes.

The site is of high importance for the good numbers and wide variety of waterfowl species that it holds in winter and on passage. The improved grassland provides feeding for Greylag Geese (*Anser anser*). This is one of a handful of sites around the south and east coasts at which Reed Warbler (*Acrocephalus scirpaceus*) has in recent years proved to be a regular breeding species. For some years in the 1980s, Bearded Tit (*Panurus biarmicus*) bred here at its only site in Ireland, emphasizing the potential of this site to hold the community of reedswamp species present in Great Britain, but largely absent in Ireland. The shingle beach is a breeding site for the country's largest colony of Little Tern (*Sterna albifrons*) and supports 19% of the all-Ireland population.

5.3 Conservation Objectives

As per the Habitats Directive, the focus of the AA at this second stage should be on the integrity of European sites *in light of their conservation objectives*. Generic conservation objectives have been compiled for the relevant European sites. These are based on maintaining/restoring the favourable conservation condition of the habitats and species for which sites are selected.

The “favourable conservation status” of a habitat or species is defined by Articles 1(e) and 1(i) of the Habitats Directive as follows:

“The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:

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

The conservation status of a species is the sum of the influences acting on the species that may affect the long-term distribution and abundance of its populations. The conservation status will be taken as ‘favourable’ when:

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

TABLE 1. CONSERVATION OBJECTIVES OF THE MURROUGH WETLANDS SAC AND THE MURROUGH SPA.

The Murrough Wetlands SAC (002249) Conservation Objective: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected:	
Qualifying Interests (*= priority habitats) ¹	Distance to Site
[1210] Annual vegetation of drift lines inadequate [1220] Perennial vegetation of stony banks inadequate [1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) inadequate [1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) inadequate [7210] Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> inadequate [7230] Alkaline fens Bad	2.7km
The Murrough SPA (004186) Conservation Objective: To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA To maintain or restore the favourable conservation condition of the wetland habitat at The Murrough SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.	

¹ Status based on NPWS (2019a)

Special Conservation Interests ²	Distance to Site
[A001] Red-throated Diver (<i>Gavia stellata</i>) Amber [A043] Greylag Goose (<i>Anser anser</i>) Amber [A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) Amber [A050] Wigeon (<i>Anas penelope</i>) Amber [A052] Teal (<i>Anas crecca</i>) Amber [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) Amber [A184] Herring Gull (<i>Larus argentatus</i>) Amber [A195] Little Tern (<i>Sterna albifrons</i>) Amber [A999] Wetland and Waterbirds	2.8km

6 IMPACT ASSESSMENT

6.1 Linkages to Annex I Habitats/Species

Table 2 below describes the potential impact pathways linking the Development to the QI/SCIs of The Murrough Wetlands SAC and The Murrough SPA.

Table 2. Potential pathways between the Development Site and the qualifying interests of The Murrough Wetlands SAC and the Murrough SPA.

Feature of interest (Receptor)	Potential Pathways for Significant Effects
The Murrough Wetlands SAC	
[1210] Annual vegetation of drift lines	No –According to NPWS data ³ , this habitat is remote from Broad Lough Estuary. The closest example of this habitat is adjacent to the East Coast Nature Reserve, approximately 9km north of where the River Vartry discharges into the Irish Sea.
[1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	<p>Yes There was a potential hydrological connection between the Site and these habitats via surface water discharges from the Site into the Vartry River - It was proposed to construct a new surface water sewer as part of the Development, and discharge surface water from the Site to the Vartry River.</p> <p>No As noted in the remedial AA Screening Report, the potential for contaminants generated at the Site of the Development to reach The Murrough Wetlands SAC and cause significant effects as a result of <u>surface water discharges to the combined sewer network would have been negligible</u> as:</p> <ul style="list-style-type: none"> The combined sewerage network would have conveyed surface water flows to the Wicklow WWTP Combined sewer overflows (CSOs) will only overflow during severe rainfall events when the capacity of the combined sewer system is exceeded;

² Status based on Gilbert et al. (2021)

³ <https://www.npws.ie/maps-and-data/habitat-and-species-data/article-17/2019>

Feature of interest (Receptor)	Potential Pathways for Significant Effects
	<ul style="list-style-type: none"> • There is significant potential for dilution in the surface water network during these heavy rainfall events; • The Wicklow WWTP was commissioned in February 2010 to allow for the future growth of Wicklow, Rathnew and Ashford and therefore would have been functioning below capacity during the construction works carried out; • The Wicklow WwTP is currently compliant with the Discharge Licence and the Urban Wastewater Treatment Directive and can meet current and future needs (Irish Water, 2018). <p>As noted in the remedial AA Screening Report, the potential for contaminants generated at the Site of the Development to reach The Murrough Wetlands SAC and cause significant effects as a result of <u>groundwater flows</u> would have been negligible as:</p> <ul style="list-style-type: none"> • The locally important bedrock of the Maulin Formation underlying the Site is characterised by local scale groundwater flow paths. • The intervening distance between the Site and the European sites (2.7 km and 2.8 km as the crow flies, and 4km downstream via the Vartry River) • The likelihood of the dilution and dispersion of any spillage / leakage within the groundwater and surface water body • The temporary nature of any accidental pollution events. <p>As noted in the remedial AA Screening Report, the potential for <u>foul waters</u> generated at the Site of the Development to reach The Murrough Wetlands SAC and cause significant effects during the Operational Phase would have been negligible due to:</p> <ul style="list-style-type: none"> • CSOs will only overflow during severe rainfall events when the capacity of the combined sewer system is exceeded; • The potential for dilution in the surface water network during these heavy rainfall events; • The Wicklow WWTP was commissioned in February 2010 to allow for the future growth of Wicklow, Rathnew and Ashford and therefore would have been functioning below capacity; • The Wicklow WwTP is currently compliant with the Discharge Licence and the Urban Wastewater Treatment Directive and can meet current and future needs (Irish Water, 2018). <p>As SuDS measures were proposed within the project design, no impacts during the Operational Phase would be anticipated.</p> <p>The intervening distance between the Site and the SAC (2.7 km as the crow flies) is sufficient to exclude the possibility of significant effects on the SAC arising from: emissions of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction Phase; increased traffic volumes during the Construction and Operational Phase and associated emissions; potential increased lighting emitted from the Site during Construction and Operational Phase; and increased human presence at the Site during Construction and Operational Phase.</p>
[7210] Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i>	<p>No – no potential pathway for impacts – terrestrial habitat with no connection with the Development Site.</p> <p>The intervening distance between the Site and the SAC (2.7 km as the crow flies) is sufficient to exclude the possibility of significant effects on the SAC arising from: emissions of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction Phase; increased traffic volumes during the Construction and Operational Phase and associated emissions; potential increased lighting emitted from the Site during Construction and Operational Phase; and increased human presence at the Site during Construction and Operational Phase.</p>
[1220] Perennial vegetation of stony banks	<p>The intervening distance between the Site and the SAC (2.7 km as the crow flies) is sufficient to exclude the possibility of significant effects on the SAC arising from: emissions of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction Phase; increased traffic volumes during the Construction and Operational Phase and associated emissions; potential increased lighting emitted from the Site during Construction and Operational Phase; and increased human presence at the Site during Construction and Operational Phase.</p>
[7230] Alkaline fens	<p>The intervening distance between the Site and the SAC (2.7 km as the crow flies) is sufficient to exclude the possibility of significant effects on the SAC arising from: emissions of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction Phase; increased traffic volumes during the Construction and Operational Phase and associated emissions; potential increased lighting emitted from the Site during Construction and Operational Phase; and increased human presence at the Site during Construction and Operational Phase.</p>

Feature of interest (Receptor)	Potential Pathways for Significant Effects
The Murrough SPA	
<p>[A001] Red-throated Diver (<i>Gavia stellata</i>) Amber</p> <p>[A043] Greylag Goose (<i>Anser anser</i>) Amber</p> <p>[A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) Amber</p> <p>[A050] Wigeon (<i>Anas penelope</i>) Amber</p> <p>[A052] Teal (<i>Anas crecca</i>) Amber</p> <p>[A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) Amber</p> <p>[A184] Herring Gull (<i>Larus argentatus</i>)</p> <p>[A195] Little Tern (<i>Sterna albifrons</i>)</p>	<p>Yes</p> <p>These bird species may forage/roost/breed in the wetland habitat associated with the SPA. There was a potential hydrological connection between the Site and these birds via surface water discharges from the Site into the Vartry River - It was proposed to construct a new surface water sewer as part of the Development, and discharge surface water from the Site to the Vartry River.</p> <p>No</p> <p>As noted in the remedial AA Screening Report, the potential for contaminants generated at the Site of the Development to reach The Murrough SPA and cause significant effects as a result of surface water <u>discharges to the combined sewer network</u> would have been negligible as:</p> <ul style="list-style-type: none"> • The combined sewerage network would have conveyed surface water flows to the Wicklow WWTP • Combined sewer overflows (CSOs) will only overflow during severe rainfall events when the capacity of the combined sewer system is exceeded; • There is significant potential for dilution in the surface water network during these heavy rainfall events; • The Wicklow WWTP was commissioned in February 2010 to allow for the future growth of Wicklow, Rathnew and Ashford and therefore would have been functioning below capacity during the construction works carried out; • The Wicklow WwTP is currently compliant with the Discharge Licence and the Urban Wastewater Treatment Directive and can meet current and future needs (Irish Water, 2018).
<p>[A999] Wetlands</p>	<p>As noted in the remedial AA Screening Report, the potential for contaminants generated at the Site of the Development to reach The Murrough SPA and cause significant effects as a result of <u>groundwater flows</u> would have been negligible as:</p> <ul style="list-style-type: none"> • The locally important bedrock of the Maulin Formation underlying the Site is characterised by local scale groundwater flow paths. • The intervening distance between the Site and the European sites (2.7 km and 2.8 km as the crow flies, and 4km downstream via the Vartry River) • The likelihood of the dilution and dispersion of any spillage / leakage within the groundwater body and surface water body • The temporary nature of any accidental pollution events. <p>As noted in the remedial AA Screening Report, the potential for <u>foul waters</u> generated at the Site of the Development to reach The Murrough SPA and cause significant effects during the Operational Phase would have been negligible due to:</p> <ul style="list-style-type: none"> • CSOs will only overflow during severe rainfall events when the capacity of the combined sewer system is exceeded; • The potential for dilution in the surface water network during these heavy rainfall events; • The Wicklow WWTP was commissioned in February 2010 to allow for the future growth of Wicklow, Rathnew and Ashford and therefore would have been functioning below capacity; • The Wicklow WwTP is currently compliant with the Discharge Licence and the Urban Wastewater Treatment Directive and can meet current and future needs (Irish Water, 2018).

Feature of interest (Receptor)	Potential Pathways for Significant Effects
	<p>As SuDS measures were proposed within the project design, no impacts during the Operational Phase would be anticipated.</p> <p>The Development Site does not provide suitable ex-situ habitat for any of the bird species listed for this SPA.</p> <p>The intervening distance between the Site and the SPA (2.8 km as the crow flies) is sufficient to exclude the possibility of significant effects on the SPA arising from: emissions of noise, dust, pollutants and/or vibrations emitted from the Site during the Construction Phase; increased traffic volumes during the Construction and Operational Phase and associated emissions; potential increased lighting emitted from the Site during Construction and Operational Phase; and increased human presence at the Site during Construction and Operational Phase.</p>

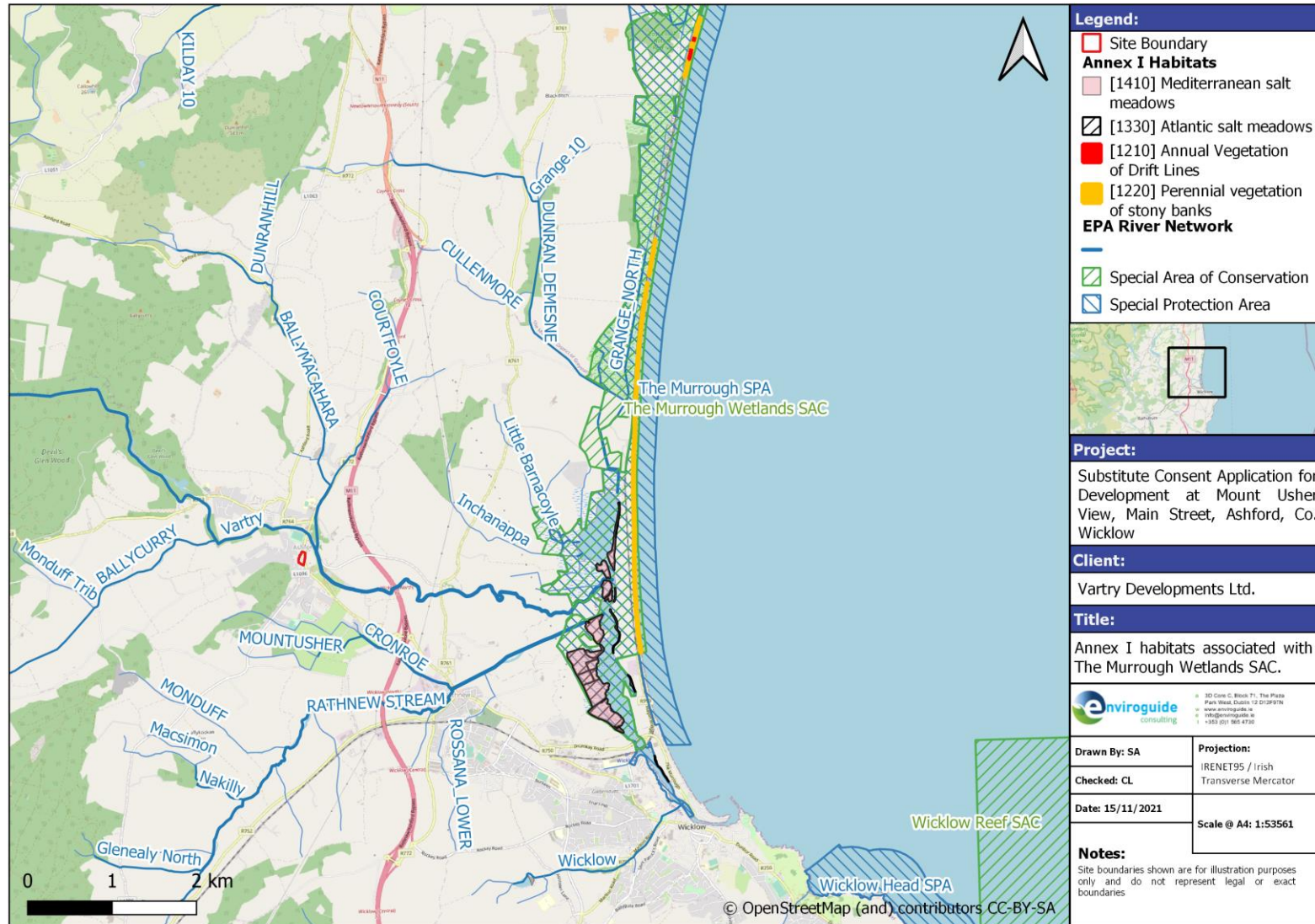


Figure 5. Annex I Habitats associated with The Murrugh Wetlands SAC (Data obtained from the NPWS).

6.2 Impacts on Annex I Habitats/Species

This section considers the potential impacts of the Development on the qualifying interests and special conservation interests of The Murrough Wetlands SAC and The Murrough SPA. Potential impacts are based on information regarding the qualifying interests and conservation objectives of the Sites and have been informed by a desk study. Impact assessment is based on the Source-Pathway-Receptor model. Where no pathway exists, there is no possibility for significant effects on any qualifying interest of the European Site in question. The assessment is concentrated solely on the features and potential impacts highlighted in the screening assessment, i.e impacts relating to surface water quality.

As per Section 177G under Part XA of the Planning and Development Act 2000, as amended ("the 2000 Act"):

"177G. — (1) A remedial Natura impact statement shall contain the following:

*(a) a statement of the significant effects, if any, on the relevant European site which **have occurred or which are occurring or which can reasonably be expected to occur** because the development the subject of the application for substitute consent was carried out; [emphasis added]*

(b) details of —

(i) any appropriate remedial or mitigation measures undertaken or proposed to be undertaken by the applicant for substitute consent to remedy or mitigate any significant effects on the environment or on the European site;

(ii) the period of time within which any such proposed remedial or mitigation measures shall be carried out by or on behalf of the applicant;"

As such, it is necessary to assess the impact of the Development on European sites taking into consideration the extent of the works carried out, any mitigation measures carried out, and any works proposed, but not yet undertaken.

6.3 Sources

6.3.1 Construction Phase – July 2015-November 2016

According to the Wicklow County Council planning applications web page, commencement notices for development were issued, with the intention to commence development on the following dates:

- Commencement: July 2015 – (proposed) end-date: November 2016
- Commencement: January 2016 – (proposed) end-date: November 2016

The following works were carried out as part of the Development:

- Site clearance over the red line area (entire)
- Installation of underground services within red line boundary area.
- Instatement of footpath edge and footpath to front (east) of site.
- Instatement of entrance in south-eastern corner of site.
- Part construction of the permitted scheme under Reg. Ref. 081704 (Table 3).

Table 3. Development permitted under Reg. Ref. 081704.

Block No.	Height (stories)	Accommodation	Ref. 081704 No. of residential units	Units nos.	Stage of completion
A	2.5 – 3	Ground floor retail with residential above	5	1-5	Pad level
B	2.5 – 3	Ground floor retail with residential above	4	6-9	Pad level
C	3	Ground floor office with residential above	6	10-15	Roof level (roof complete, opes complete)
D	3	Ground floor office with residential above	5	16-20	Roof level (roof complete, opes complete)
E	2.5	Semi-detached houses	4	21 & 22, 23 & 24	Roof level (roof complete, not weather-tight)
Total			24 no. residential units (20 no. with retail or office below)		

Importantly, although it was proposed as part of the Development, construction of the surface water sewer did not commence during the Construction works carried out. In this remedial NIS, this surface water sewer is considered a key pathway for significant effects on the relevant European sites.

Sources for significant effects from the Development have been identified as follows:

- Construction Phase
 - Uncontrolled releases of silt, sediments and/or other pollutants to air due to earthworks.
 - Surface water run-off containing silt, sediments and/or other pollutants

6.4 Pathway

Pathways between the Development and the qualifying interests and special conservation interests of The Murrough Wetlands SAC and The Murrough SPA were identified and are outlined below. Each qualifying interest/special conservation interest and potential pathway for significant effects between them and Development are highlighted in Table 2.

6.4.1 Construction Works Undertaken

It is important to note that as the surface water pipe was not constructed as part of the Development during the construction works undertaken, this pathway for significant effects did not exist during the construction works carried out. As such, during this period, the only pathway which existed during the Construction Phase was a weak hydrological pathway via the combined sewer network which would have conveyed surface water to Wicklow WWTP and ultimately Wicklow Bay, and combined sewer overflows (CSOs) which would have discharged stormwater from the combined sewer to surface waterbodies (e.g. River Vartry

and Wicklow Bay), and a weak hydrogeological pathway. As outlined in Table 2, the potential for contaminated stormwater generated at the Site (during the works carried out) to reach The Murrough Wetlands SAC and The Murrough SPA via surface water discharges to the combined sewer network and cause significant effects would have been **negligible** as:

- CSOs will only overflow during severe rainfall events when the capacity of the combined sewer system is exceeded;
- There is significant potential for dilution in the surface water network during these heavy rainfall events;
- The Wicklow WWTP was commissioned in February 2010 to allow for the future growth of Wicklow, Rathnew and Ashford and therefore would have been functioning below capacity during the construction works carried out;
- The Wicklow WwTP is currently compliant with the Discharge Licence and the Urban Wastewater Treatment Directive and can meet current and future needs (Irish Water, 2018).

In addition, the potential for contaminants generated at the Site of the Development to reach The Murrough SPA and cause significant effects as a result of groundwater flows **would have been negligible** as:

- The locally important bedrock of the Maulin Formation underlying the Site is characterised by local scale groundwater flow paths.
- The intervening distance between the Site and the European sites (2.7 km and 2.8 km as the crow flies, and 4km downstream via the Vartry River)
- The likelihood of the dilution and dispersion of any spillage / leakage within the groundwater body
- The temporary nature of any accidental pollution events.

Furthermore, although not considered necessary to avoid significant effects on The Murrough Wetlands SAC and The Murrough SPA, mitigation measures for the Construction Phase were detailed within the Construction Management Plan dated March 2009, which was issued as part of the Further Information documents for Application Reg. Ref. 081704. Although it is noted that the Construction Phase did not commence until several years following the issue of this CMP, it is possible that the standard best practice measures for surface water protection outlined in it were implemented during the construction works carried out. Relevant measures within this CMP include:

- Storage of all fuels in accordance with best practice (with the aim of ensuring protection of groundwater and streams at all times).
- Application of appropriate mitigation measures should contaminated soil be encountered on site, to be carried out in consultation with Wicklow County Council.
- The construction of a clay/topsoil bund along the lower boundary of the Site and adjacent to the existing footpath, to ensure all surface water run-off is contained within the Site. The surface water run-off would be directed towards an on-site attenuation

pond whereby all silt and debris would be settled out prior to discharge to the public sewer.

- A dust minimisation plan

6.4.2 Proposed Construction Works (not undertaken to date)

A new surface water sewer was proposed as part of the Development. The construction of this sewer could have resulted in potential impacts on the QI habitats and SCI species and wetlands of the relevant European sites due to possible discharges of surface waters containing sediment, silt, oils and/or other pollutants into the River Vartry which could have eventually reached The Murrough Wetlands SAC and The Murrough SPA. No specific mitigation measures were identified in the CMP for Reg. Ref. 081704 regarding the construction of the surface water sewer. As this sewer would have discharged directly to the Vartry River, it could have acted as a pathway for potential significant effects on The Murrough Wetlands SAC and The Murrough SPA.

6.5 Receptor

The receptors are identified in Table 2 and are the qualifying interests and special conservation interests associated with the European Sites assessed in this rNIS.

6.6 Potential impacts of the Development on key habitats and species

A surface water pathway, arising due to the proposed construction of a surface water sewer, was identified between the following qualifying interests and special conservation interests of The Murrough Wetlands SAC and The Murrough SPA and the Development Site:

The Murrough Wetlands SAC

[1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

[1410] Mediterranean salt meadows (*Juncetalia maritimi*)

The Murrough SPA

[A001] Red-throated Diver (*Gavia stellata*) Amber

[A043] Greylag Goose (*Anser anser*) Amber

[A046] Light-bellied Brent Goose (*Branta bernicla hrota*) Amber

[A050] Wigeon (*Anas penelope*) Amber

[A052] Teal (*Anas crecca*) Amber

[A179] Black-headed Gull (*Chroicocephalus ridibundus*) Amber

[A184] Herring Gull (*Larus argentatus*)

[A195] Little Tern (*Sterna albifrons*)

[A999] Wetlands

There are no site-specific conservation objectives for The Murrough Wetlands SAC and The Murrough SPA. Generic Conservation Objectives for the Murrough Wetland SAC are “to

maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected”. Generic Conservation Objectives for The Murrough SPA are “to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA” and “to maintain or restore the favourable conservation condition of the wetland habitat at The Murrough SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.”

As the conservation objectives for the European sites are generic and do not give in-depth details in terms of each individual QI and SCI; attributes and targets were taken from other European sites with the same QIs. Table 4 below outlines the attributes and targets associated with the relevant qualifying interests and Special Conservation Interest species for The Murrough Wetlands SAC and The Murrough SPA. The potential significant effects of the Development on these attributes and targets are also assessed.

TABLE 4 ASSESSMENT OF THE POTENTIAL IMPACT OF THE DEVELOPMENT ON SITE SPECIFIC CONSERVATION OBJECTIVES OF RELEVANT QI HABITATS AND SPECIES WITHIN THE MURROUGH WETLANDS SAC AND THE MURROUGH SPA.

Attribute	Target	Assessment of likely significant effects (<i>Construction works carried out to date</i>)	Assessment of likely significant effects (<i>Construction works proposed – i.e. completion of site structures, landscaping and the surface water sewer & Operational Phase</i>)
The Murrough Wetlands SAC			
[1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)			
Conservation Objective: To maintain or restore the favourable conservation condition of Atlantic salt meadows (<i>GlaucoPuccinellietalia maritimae</i>), which is defined by the following list of attributes and targets:			
Habitat area	Area stable or increasing, subject to natural processes, including erosion and succession.	<p>None.</p> <p>The proposed new surface water sewer was not constructed (therefore this pathway for potentially contaminated surface water run-off did not exist)</p> <p>As the Site was linked to the relevant European via a weak hydrological and hydrogeological link (as discussed above in section 6.4.1), there would have been no possibility for significant effects arising from contaminated surface water run-off.</p>	<p>Potential for significant effects.</p> <p>In the absence of pollution control measures during the Construction Phase, surface water run-off/discharges from the construction of the surface water sewer could have had the potential to impact the Atlantic Salt Meadow habitat associated with The Murrough Wetlands SAC.</p>
Habitat distribution	No decline, or change in habitat distribution, subject to natural processes		
Physical structure: sediment supply	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions		
Physical structure: creeks and pans	Maintain creek and pan structure, subject to natural processes, including erosion and succession		
Physical structure: flooding regime	Maintain natural tidal regime		
Vegetation structure: zonation	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		

Attribute	Target	Assessment of likely significant effects (<i>Construction works carried out to date</i>)	Assessment of likely significant effects (<i>Construction works proposed – i.e. completion of site structures, landscaping and the surface water sewer & Operational Phase</i>)
Vegetation structure: vegetation height	Maintain structural variation within sward		
Vegetation structure: vegetation cover	Maintain more than 90% area outside creeks vegetated		
Vegetation composition: typical species and subcommunities	Maintain range of subcommunities with typical species listed in SMP (McCorry and Ryle, 2009)		
Vegetation structure: negative indicator species - <i>Spartina anglica</i>	Prevent establishment of cordgrass		
[1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>)			
Conservation Objective: To maintain or restore the favourable conservation condition of Mediterranean salt meadows (<i>Juncetalia maritimi</i>), which is defined by the following list of attributes and targets:			
Habitat area	Area stable or increasing, subject to natural processes, including erosion and succession.	None. The proposed new surface water sewer was not constructed (therefore this pathway for potentially contaminated surface water run-off did not exist)	Potential for significant effects. In the absence of pollution control measures during the Construction Phase, surface water run-off/discharges from the construction of the surface water sewer could have had the potential to impact the Mediterranean Salt Meadow habitat associated with The Murrrough Wetlands SAC.
Habitat distribution	No decline, subject to natural processes		
Physical structure: sediment supply	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions	As the Site was linked to the relevant European via a weak hydrological and hydrogeological link (as discussed above in section 6.4.1), there would have been no possibility for significant effects arising from contaminated surface water run-off.	
Physical structure: creeks and pans	Maintain creek and pan structure, subject to natural processes, including erosion and succession		
Physical structure: flooding regime	Maintain natural tidal regime		
Vegetation structure: zonation	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession		
Vegetation structure: vegetation height	Maintain structural variation within sward		
Vegetation structure: vegetation cover	Maintain more than 90% of area outside creeks vegetated		
Vegetation composition: typical	Maintain range of subcommunities with		

Attribute	Target	Assessment of likely significant effects (<i>Construction works carried out to date</i>)	Assessment of likely significant effects (<i>Construction works proposed – i.e. completion of site structures, landscaping and the surface water sewer & Operational Phase</i>)
species and subcommunities	typical species listed in SMP (McCorry and Ryle, 2009)		
Vegetation structure: negative indicator species - <i>Spartina anglica</i>	There is currently no common cordgrass (<i>Spartina anglica</i>) in this SAC. Prevent establishment of cordgrass		
The Murrough SPA			
<p>[A001] Red-throated Diver (<i>Gavia stellata</i>); [A043] Greylag Goose (<i>Anser anser</i>); [A046] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>); [A050] Wigeon (<i>Anas penelope</i>); [A052] Teal (<i>Anas crecca</i>); [A179] Black-headed Gull (<i>Chroicocephalus ridibundus</i>); [A184] Herring Gull (<i>Larus argentatus</i>); [A195] Little Tern (<i>Sterna albifrons</i>)</p> <p>Conservation Objective: To maintain or restore the favourable conservation condition of the listed bird species, which is defined by the following list of attributes and targets:</p>			
Population trend	Long term population trend stable or increasing	None.	Potential for significant effects.
Distribution	No significant decrease in the range, timing or intensity of use of areas by the aforementioned species, other than that occurring from natural patterns of variation	<p>The proposed new surface water sewer was not constructed (therefore this pathway for potentially contaminated surface water run-off did not exist)</p> <p>As the Site was linked to the relevant European via a weak hydrological and hydrogeological link (as discussed above in section 6.4.1), there would have been no possibility for significant effects arising from contaminated surface water run-off.</p>	<p>In the absence of pollution control measures, surface water run-off/discharges from the construction of the surface water sewer could have had the potential to negatively affect the status of habitats and foraging resources which these bird species rely on, during the Construction Phase of the Development.</p>
<p>[A999] Wetlands</p> <p>Conservation Objective: To maintain or restore the favourable conservation condition of wetland habitat as a resource for the regularly occurring migratory waterbirds that utilise it. This is defined by the following attribute and target:</p>			
Habitat area	The permanent area occupied by the wetland habitat should be stable, other than that occurring from natural patterns of variation	<p>None.</p> <p>The proposed new surface water sewer was not constructed (therefore this pathway for potentially contaminated surface water run-off did not exist)</p> <p>As the Site was linked to the relevant European via a weak hydrological and hydrogeological link (as discussed above in section 6.4.1), there would have been no possibility for significant effects</p>	<p>Potential for significant effects.</p> <p>The Development did not have the potential to cause changes to the habitat area of the wetlands in this SPA. However, in the absence of pollution control measures surface water run-off/discharges from the construction of the surface water sewer could have had the potential to negatively affect the status of habitats and foraging resources within the wetlands</p>

Attribute	Target	Assessment of likely significant effects (<i>Construction works carried out to date</i>)	Assessment of likely significant effects (<i>Construction works proposed – i.e. completion of site structures, landscaping and the surface water sewer & Operational Phase</i>)
		arising from contaminated surface water run-off.	during the Construction Phase of the Development.

6.7 In-combination Impacts

As noted in the remedial AA Screening report, a search of existing planning permissions on record in the Ashford area at the time of original lodgement and the months leading up to original lodgement (January 2008 – October 2008) was carried out. In addition, a search of existing planning permissions on record in the Ashford area at the time of lodgement of the Extension for the Development (141188) and the months leading up to it (October 2013 to March 2014) was carried out. The listed developments were typically small in scale (once-off dwellings, garages, extensions, attic conversions). The Ashford Local Area Plan 2008-2014 was also reviewed and considered for possible in-combination effects with the Development. Based on the available information, it is considered that there were no means for the Development to act in-combination with any plans or projects which were permitted at the time of lodgement that would cause any likely significant effects on any European Sites.

7 MITIGATION MEASURES

7.1 Construction Phase

7.1.1 Mitigation Measures outlined in the Construction Management Plan, for works carried out

Mitigation measures potentially employed during the Construction Phase (as per the Construction Management Plan) included:

- Storage of all fuels in accordance with best practice (with the aim of ensuring protection of groundwater and streams at all times).
- Application of appropriate mitigation measures should contaminated soil be encountered on site, to be carried out in consultation with Wicklow County Council.
- The construction of a clay/topsoil bund along the lower boundary of the Site and adjacent to the existing footpath, to ensure all surface water run-off is contained within the Site. The surface water run-off would be directed towards an on-site attenuation pond whereby all silt and debris would be settled out prior to discharge to the public sewer.
- A dust minimisation plan

7.1.2 Additional mitigation measures which should be implemented for future works as best practice

- There will be no washdown facilities for plant and equipment on the Development Site.
- Concrete mixer trucks will not be permitted to wash out on Site with the exception of cleaning the chute into a container which will be removed off Site to an authorised facility.
- All works carried out as part of the Development will comply with all Statutory Legislation including the Local Government (Water Pollution) acts, 1977 and 1990 and the contractor will cooperate fully with the Environment Section of Wicklow County Council in this regard.

- Personnel working on the Site will be trained in the implementation of environmental control and emergency procedures. Standard best international practice will be adhered to throughout the construction phase, including but not limited to:
 - CIRIA, (2001), Control of Water Pollution from Construction Sites, Guidance for Consultants and Contractors;
 - Construction Industry Research and Information Association (CIRIA) Environmental Good Practice on Site (C650), 2005;
 - BPGCS005, Oil Storage Guidelines;
 - CIRIA 697, The SUDS Manual, 2007;
 - UK Pollution Prevention Guidelines (PPG) UK Environment Agency, 2004;
 - Construction Industry Research and Information Association CIRIA C648: Control of water pollution from linear construction projects: Technical guidance (Murnane et al. 2006);
 - CIRIA C648: Control of water pollution from linear construction projects: Site guide (Murnane et al. 2006); and
 - Inland Fisheries Ireland (2016). Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters.
- Storm drain inlets which could receive stormwater from the project will be protected throughout the Construction Phase. Inlet protection will be installed before soil disturbing activities begin.
- Pumping of concrete will be monitored to ensure that there is no accidental discharge;
- Any oil and lubricant changes and maintenance will take place offsite;
- Any imported materials will, as much as possible, be placed on Site in their proposed location and double handling will be avoided. Where this is not possible designated temporary material storage areas will be used;
- Temporary oil interceptor facilities will be installed and maintained where Site Works involve the discharge of drainage waters to nearby watercourses.
- All containment and treatment facilities will be regularly inspected and maintained.
- Refuelling of plant during the Construction Phase will only be carried out at designated refuelling station locations on site. Each station will be fully equipped for spill response and a specially trained and dedicated Environmental and Emergency Spill Response team will be appointed before the commencement of works on site.
- Only emergency breakdown maintenance will be carried out on site. Drip trays and spill kits will be available on site to ensure that any spills from vehicles are contained and removed off site;
- All personnel working on site will be trained in pollution incident control response. Emergency silt control & spillage response procedures will ensure that appropriate information will be available on site outlining the spillage response procedures and a contingency plan to contain silt during an incident;
- Portaloos and/or containerised toilets and welfare units will be used to provide facilities for site personnel. All associated waste will be removed from site by a licenced waste disposal contractor

All wastewater generated on-site during the Construction Phase will be stored and disposed of appropriately by discharge to foul sewer or by tankering off site. Under no circumstances will any untreated wastewater generated onsite (from equipment washing, road sweeping etc.) be released into nearby ditches or watercourses.

7.1.3 Mitigation measures required for construction of the surface water sewer

It was proposed to construct a new surface water sewer and headwall in order to discharge surface water to the Vartry River, however this sewer was not constructed. No specific mitigation measures were provided for these works. **As such, the following outlines specific mitigation measures to be implemented throughout the construction of the surface water sewer.**

A small coffer dam will be placed in the river at the outfall during the Construction Phase.

All in-stream works must be carried out in accordance with an approved method statement and under the direction of Inland Fisheries Ireland personnel.

Once the schedule of instream works has been drawn up the developer will consult with Inland Fisheries Ireland (IFI) before commencing works. All works will be completed in agreement with IFI.

The works shall be carried out in accordance with IFI (2016) Guidelines on the Protection of fisheries during construction works in and adjacent to water. Works associated with the headwall construction will be supervised by an Ecological Clerk of Works (ECoW).

7.1.3.1 Constraints Zone

- The timing of the headwall installation will be scheduled to ensure no instream works shall be carried out during the closed season for instream works (October 1st to June 30th).
- Prior to construction on the headwall, a constraints zone will be identified and implemented at the construction area adjacent to the river Vartry. This area will:
 - Ensure the avoidance of physical damage to the Vartry;
 - Ensure all work will be carried out in the dry and effectively isolated from the Vartry River;
 - Ensure that no suspended sediment and associated nutrients are released into surface waters from excavation and earthworks;
- No stockpiling of construction materials will take place within the constraints zone.
- No refuelling of machinery or overnight parking of machinery is permitted in this area.
- Pumping of concrete will be monitored to ensure that there is no accidental discharge.
- There will be no mixer washings or excess concrete discharged on Site. All excess concrete is to be removed from Site and all washout of concrete chutes to be

captured in a tank which shall be removed offsite for disposal at an authorised wastewater treatment facility.

- All machinery operations shall take place from the river bank.
- Any excess construction material shall be immediately removed from the area and sent to an authorized waste recovery facility.
- Any imported materials will, as much as possible, be placed on Site in their proposed location and double handling will be avoided. Where this is not possible designated temporary material storage areas will be used.
- Drip trays and spill kits will be available on site to ensure that any spills from vehicles are contained and removed off site.
- Where in-stream bed material is to be removed, coarse aggregates, if present, should be stockpiled for replacement in the reformed or new channel. (Note that care should also be taken with in-stream vegetation if required for landscape treatments).
- No direct discharges will be made to waters where there is potential for cement or residues in discharges.
- The pH of any and all discharges made from and during the Construction Phase of the headwall shall be in the range of 6-9 units and not alter the pH of any receiving waters by more than +/- 0.5 pH units.
- Run-off from the working site or any areas of exposed soil should be channelled and intercepted at regular intervals for discharge to silt-traps or lagoons with over-flows directed to land rather than to a watercourse.
- The developer will ensure that erosion control i.e. silt-traps, silt-fencing and swales are regularly maintained during the Construction Phase.
- A regular review of weather forecasts of heavy rainfall will be conducted, and a contingency plan will be prepared for before and after such events to minimise any potential nuisances. As the risk of the break-out of silt laden run-off is higher during these weather conditions, no work will be carried out during such periods where possible.
- A settlement area for treatment of pumped water from excavations/the bunded area will be established on site. The settlement area will consist of a silt fence surrounded by a row of sandbags. A dewatering/silt bag will be fitted at the discharge point. Alternatively silt laden waters will be tankered off site to a licenced facility.
- Natural vegetation will be left intact where possible.
- A survey for invasive flora will be carried out at the location of the headwall prior to works commencing. If any invasive flora listed on Schedule III of the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011, as amended) are recorded, an Invasive Species Management Plan will be prepared prior to works taking place.

- Biosecurity measures will be strictly adhered to throughout the proposed works. Measures will be in accordance with IFI (2010) Biosecurity Protocol for Field Survey Work. Where staff are working instream, staff footwear and PPE will be inspected on daily completion of the works and vegetation or debris removed. Footwear will be dipped in or scrubbed with a disinfectant solution (e.g., 1% solution of Virkron Aquatic or another proprietary disinfection product) and thoroughly dried afterwards. Sandbags, if used, will not be re-used in other watercourses.

7.2 Operational Phase

As best practice, regular inspection and maintenance of all surface water infrastructure should be carried out to ensure the long-term protection of surface waterbodies hydrologically linked to the Development.

8 CONCLUSION

This remedial Natura Impact Statement details the findings of the Stage 2 Appropriate Assessment conducted to further examine the potential direct and indirect impacts of the Development at Mount Usher View, Ashford, Co. Wicklow on the following European Sites sites:

- The Murrough Wetlands SAC
- The Murrough SPA

The above sites were identified by a screening exercise that assessed likely significant effects of a range of effects that may arise from the Development. The remedial Appropriate Assessment investigated the potential direct and indirect impacts of the Development, both during Construction and Operation on the qualifying interests and special conservation interests of the above European Sites alone and in combination with other plans and projects, taking into account the site's structure, function and conservation objectives.

In the absence of suitable mitigation, the Development had the potential to cause significant effects on the above listed European sites through surface water contamination, leading to a reduction in water quality. It is deemed that mitigation measures were not necessary to avoid impacts to European sites **during the construction works carried out**. It is also noted that best practice mitigation measures were outlined in a CMP prepared as part of the original application in March 2009.

Given the absence of specific mitigation measures to protect surface waters during the construction of the new surface water sewer, its construction could have had the potential to adversely affect the integrity of the Murrough Wetlands SAC and the Murrough SPA, during the Construction Phase of the Development. Importantly, **these works were never carried out**, and as such **there is no possibility that an impact occurred**. A series of mitigation measures to protect water quality during the construction of the surface water sewer are provided in section 7.1.3.

As a result of this remedial Appropriate Assessment, it has been concluded that, ensuring the avoidance and mitigation measures are (in the case of the surface water sewer which is yet to be constructed) implemented as outlined, the Development did not **and** will not have a significant adverse effect on the qualifying interests, special conservation interests and on the integrity and extent of The Murrough Wetlands SAC and The Murrough SPA. Accordingly, the Development has not **or** will not adversely affect the integrity of any relevant European site.

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