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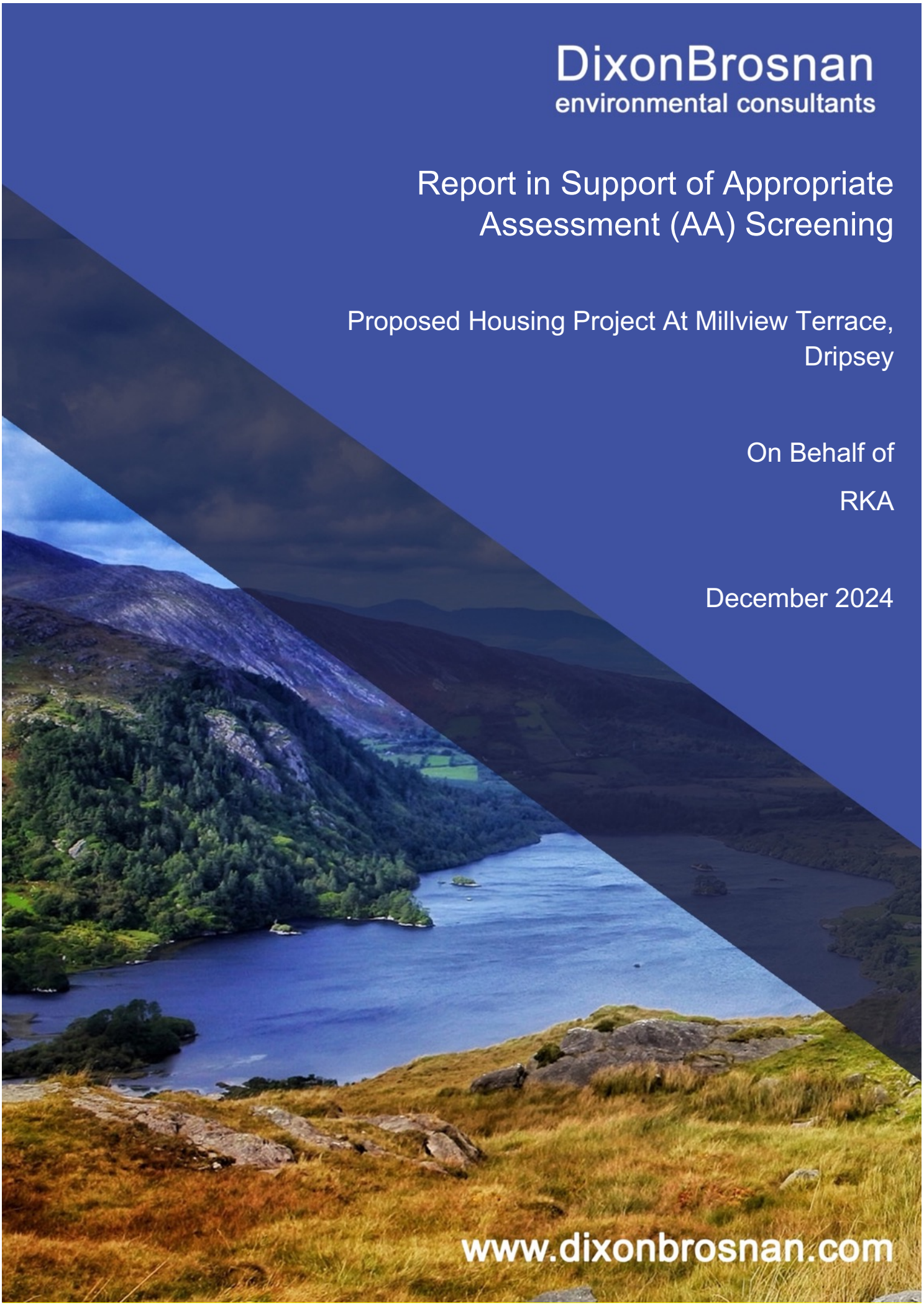
Report in Support of Appropriate Assessment (AA) Screening

Proposed Housing Project At Millview Terrace, Dripsey

On Behalf of

RKA

December 2024



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Project	Report in Support of Appropriate Assessment (AA) Screening for Proposed Housing Project At Millview Terrace, Dripsey	
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22/07/24	First Draft	Sorcha Sheehy BSc PhD
04/12/24	Issue to client	Carl Dixon BSc MSc

DixonBrosnan Lios Ri Na hAoine, 1 Redemption Road, Cork.

Tel 086 851 1437| carl@dixonbrosnan.com | www.dixonbrosnan.com

Table of Contents

1. Introduction

1.1 Background

The information in this report has been compiled by DixonBrosnan Environmental Consultants, on behalf of the applicant. It provides information on and assesses the potential for a proposed housing project at Millview Terrace, Dripsey, to impact on any European sites within its likely Zone of Impact. The information in this report forms part of and should be read in conjunction with the planning application documentation being submitted to the planning authority in connection with the proposed development.

The Birds Directive (2009/147/EC) and the Habitats Directive (92/42/EEC) put an obligation on EU Member States to establish the Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU. In Ireland, the Natura 2000 network of European sites comprises Special Areas of Conservation (SACs, including candidate SACs) and Special Protection Areas (SPAs, including proposed SPAs). SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the qualifying interests of the sites and from these the conservation objectives of the site are derived. The Birds and Habitats Directives set out various procedures and obligations in relation to nature conservation management in Member States in general, and of the European sites and their habitats and species in particular. A key protection mechanism is the requirement to consider the possible nature conservation implications of any plan or project on the Natura 2000 site network before any decision is made to allow that plan or project to proceed. Not only is every new plan or project captured by this requirement but each plan or project, when being considered for approval at any stage, must take into consideration the possible effects it may have in combination with other plans and projects when going through the process known as Appropriate Assessment (AA).

The obligation to undertake Appropriate Assessment (AA) derives from Article 6(3) and 6(4) of the Habitats Directive, and both involve a number of steps and tests that need to be applied in sequential order. Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from this strict protection in certain restricted circumstances. As set out in the Planning and Development Act 2000 as amended, a screening for appropriate assessment of an application for consent for the proposed development must be carried out by the competent authority to assess, in view of best scientific knowledge, if the proposed development, individually or in combination with another plan or project is likely to have a significant effect on any European site. Each step in the assessment process precedes and provides a basis for other steps. The results at each step must be documented and recorded carefully so there is full traceability and transparency of the decisions made.

1.2 Aim of Report

The purpose of this report is to inform the AA process as required under the Habitats Directive (92/43/EEC) in instances where a plan or project may give rise to significant impacts on a European site. This report aims to inform the Appropriate Assessment process in determining

whether the development, both alone and in combination with other plans or projects, are likely to have a significant impact on the European sites in the study area, in the context of their conservation objectives and specifically on the habitats and species for which the sites have been designated.

This report has been prepared with regard to the following guidance documents, where relevant:

- *Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC (European Commission (EC), 2018);*
- *Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodical;*
- *Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission (EC), 2021);
- *Guidance Document on Article 6(4) of the Habitats Directive 92/43/EEC* (European Commission, (EC) 2007);
- *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 and PSSP 2/10* (Department of Environment, Heritage and Local Government, 2010);
- *Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive* (International Workshop on Assessment of Plans under the Habitats Directive, 2011);
- *Commission notice Guidance document on wind energy developments and EU nature legislation,* (EC 2020);
- *Communication from the Commission on the precautionary principle. European Commission* (EC 2000);
- *Assessment of plans & projects in relation to N2K sites – Methodological Guidance* (EC 2021);
- *Guidance document on the strict protection of animal species of Community interest under the Habitats Directive* (EC 2021) and
- Office of Planning Regulator OPR Practice Note PN01 Appropriate Assessment Screening for Development Management.

1.3 Authors of Report

This report and survey work was completed by Carl Dixon MSc (Ecological Monitoring) and Dr. Sorcha Sheehy PhD (Ecology/ornithology).

Carl Dixon holds an Honours Degree (BSc) in Ecology and a Masters (MSc) in Ecological Monitoring from UCC. He is a senior ecologist who has over 25 years' experience in ecological assessment. Prior to setting up DixonBrosnan Environmental Consultants in 2000, Carl set up and ran Core Environmental Services which included REPS planning for landowners and ecological assessments. Carl has particular experience in freshwater ecology, including electrofishing fish stock assessments and water quality assessments. He also has considerable experience in habitat mapping and mammal ecology including survey work and reporting in relation to Badgers and bats. Other competencies include surveys for invasive species and bird surveys. Carl has extensive experience with regards to EIAR and NIS mitigation and impact assessment. He has experience in large-scale industrial developments with extensive experience in complex assessments as part of multi-disciplinary teams. Such projects include gas pipelines, incinerators, electrical cable routes, oil refineries and quarries.

Sorcha Sheehy PhD (Ecology/ornithology) is an ecologist and ornithologist who has worked for 15 years in environmental consultancy. She has worked on Screening/NISs for a range of small and large-scale projects with expertise in assessing impacts on birds. Sorcha's PhD research focused on bird behaviour at airports, where she studied bird avoidance behaviour and collision risk to aircraft. Her research involved field observations, post-mortem analysis and radar surveys. Sorcha has worked on bird collision risk assessments at airports throughout Ireland including Dublin airport, Cork airport, Shannon airport and Kerry airport. During her consultancy work Sorcha carried out field-based surveys and environmental reports including NIS, AA screening and EIARs. Notable projects include the Arklow Bank Wind Park, Indaver Ireland Waste Management Facility at Ringaskiddy, Irving Oil Whitegate Refinery (IOWR), Shannon LNG and Greenlink Interconnector.

2. Regulatory Context and Appropriate Assessment Procedure

2.1 Regulatory Context

The Habitats Directive (Council Directive 92/43/EEC on the *Conservation of Natural Habitats and of Wild Fauna and Flora*) aims to maintain or restore the favourable conservation status of habitats and species of community interest across Europe. The requirements of these directives are transposed into Irish law through the European Communities (Birds and Natural Habitats Regulations 2012-2022).

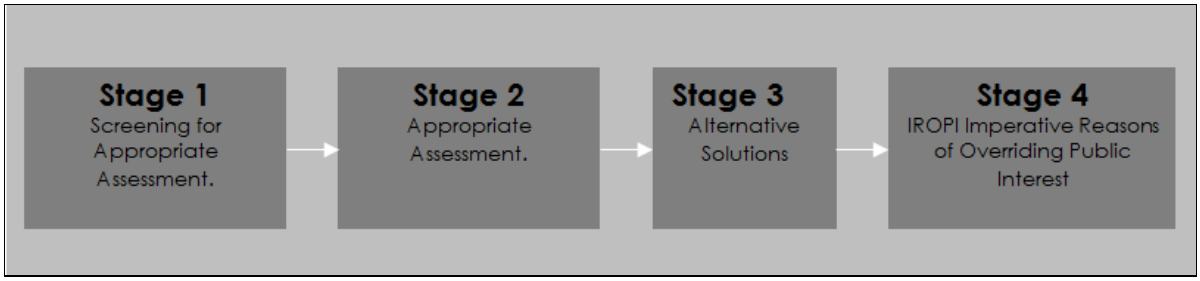
Under the Directive a network of sites of nature conservation importance have been identified by each Member State as containing specified habitats or species requiring to be maintained or returned to favourable conservation status. In Ireland the network consists of SACs and SPAs, and also candidate sites, which form the Natura 2000 network of European sites.

Article 6(3) of Council Directive 92/43/EEC of 21st May 1992 on the *Conservation of Natural Habitats and of Wild Fauna and Flora* (as amended) (hereafter 'the Habitats Directive') requires that, any plan or project not directly connected with or necessary to the management of a designated 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. A competent authority (e.g. the EPA or Local Authority) can only agree to a plan or project after having determined that it will not adversely affect the integrity of the site concerned.

The possibility of a significant effect on a designated or "European" site has generated the need for an appropriate assessment to be carried out by the competent authority for the purposes of Article 6(3). A Stage Two Appropriate Assessment is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site. The first (Screening) Stage for appropriate assessment operates merely to determine whether a (Stage Two) Appropriate Assessment must be undertaken on the implications of the plan or project for the conservation objectives of relevant European sites.

2.2 Appropriate Assessment Procedure

The assessment requirements of Article 6(3) establish a stage-by-stage approach. This assessment follows the stages outlined in the 2001 European Commission publications "Assessment of plans and projects significantly affecting European sites: methodological guidance on the provisions of Articles 6(3) and 6(4) of the Habitats Directive 92/43/EEC" (2001) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC Office for Official Publications of the European Communities, Luxembourg (EC, 2019);



The stages are as follows:

Stage One: Screening — the process which identifies any appreciable impacts upon a European site of a project or plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant;

Stage Two: Appropriate assessment — the consideration of the impact on the integrity of the European site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

Stage Three: Assessment of alternative solutions: The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European site. It is confirmed that no reliance is placed by the developer on Stage Three in the context of this application for development consent;

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain — an assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed (it is important to note that this guidance does not deal with the assessment of imperative reasons of overriding public interest). Again, for the avoidance of doubt, it is confirmed that no reliance is placed by the developer on Stage Four in the context of this application for development consent.

It is the responsibility of the competent authority, to make a decision on whether or not the proposed development should be approved, taking into consideration any potential impact upon any European site within its likely zone of impact.

3. Receiving Environment

3.1 Existing site

The proposed development site is located within the village of Dripsey, approximately 23km northwest of Cork City centre and 18km east of Macroom. The site is bound by a local road and a community amenity park to the west. Private gardens of Millview Terrace back to the north, private gardens of one-off houses to the east and a green field bounds the site to the south. The site slopes upwards from the West to the Eastern boundary with an incline of 21m across 171.5m giving a 1:8 fall across the site.

The proposed development site is 3,305m^2 /0.3305ha. The landbank (illustrated as blue line below) is 1.27ha. The remainder of the landbank may be used for future development.

3.2 Proposed development

The proposed housing development will consist of a mix of residential unit types and associated ancillary works (roads, sanitary services, SUDS, utilities, landscaped green areas, parking areas, service diversions, retaining structures and ancillary works to adjoining roads, traffic calming, drainage upgrades, miscellaneous works etc.) to create a high-quality development. Initial layout plans have been prepared for the Council owned sites which indicates:

- 8no. 2 bed 4 person houses

This layout will need to be assessed to ensure the maximum permissible density is achieved.

This site is limited by a number of constraints, notably:

- Requirement to carry out significant cut & fill on site due to its topography and associated management of excavated materials. Consultant design proposals to include appropriate design to reduce the extent of cut & fill works and promote the reuse of excavated materials on site, so as to mitigate against a full AA or EIA being required or triggered by the design.
- Existing services and associated wayleaves traversing the sites
- Public Watermain & Sewer is available (Drawings of same are not available).

The subject site is in the ownership of the Housing Agency under the Land Aggregation Scheme and therefore can be efficiently utilised by Cork County Council. A registered wayleave is in place along the Western boundary for storm service line servicing the estate to the North. There are three overhead ESB lines crossing the site to the East and the second through the middle of the site.

Figure 1. Proposed development site (red line boundary) (approximate location) | Source Mulcahy Ralphs Architects

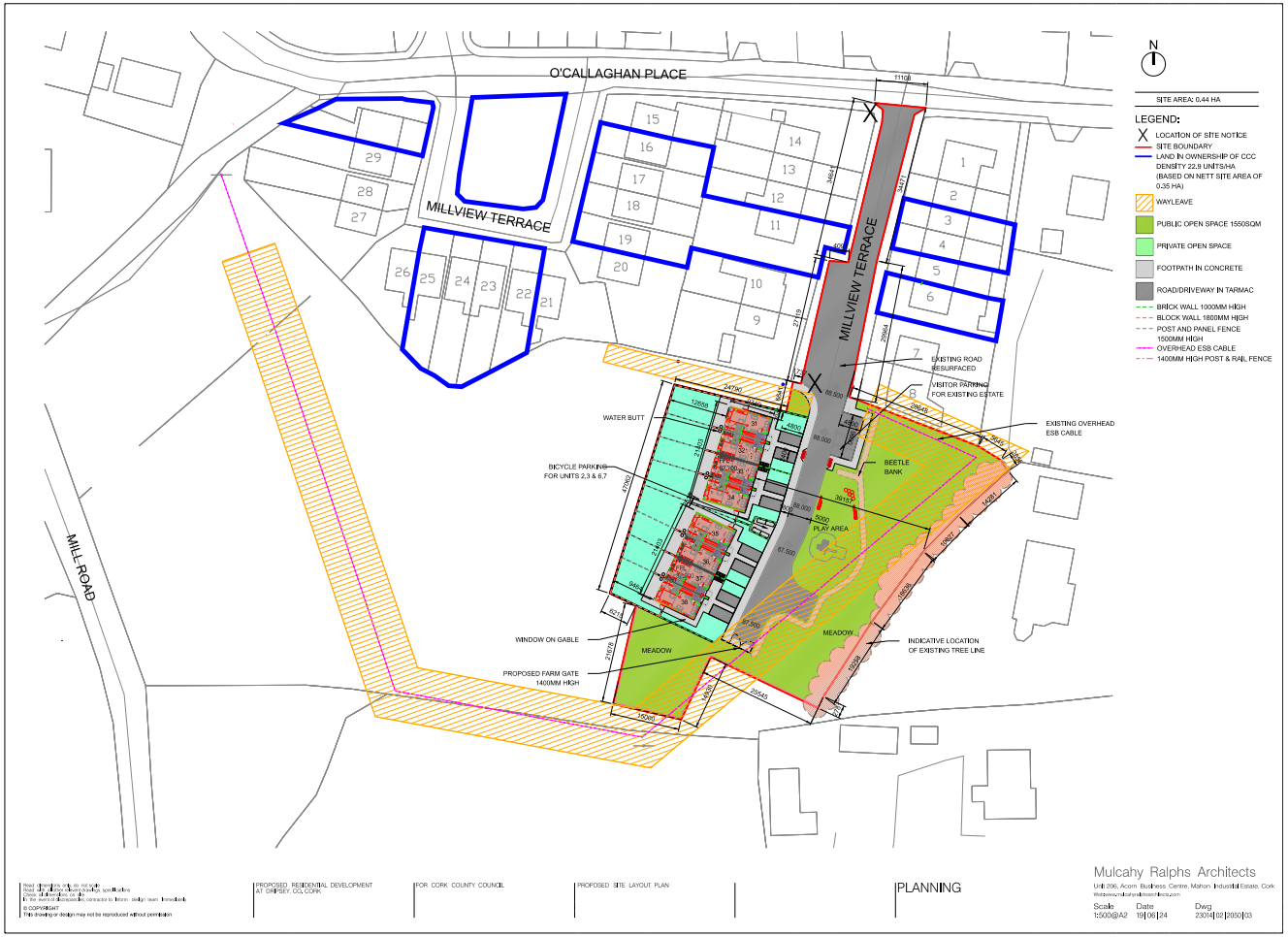


Figure 2. Site layout | Source Mulcahy Ralphs Architects

3.3 Surface Water

The proposed surface water drainage proposal includes a gravity surface water collection system which incorporates an underground drainage pipe network. All proposed drainage works is designed to comply with and be carried out in accordance with the current edition of the Recommendations for site development works for Housing Areas published by the Department of Environment and Local Government. Drainage works also shall comply with Irish Water/Local Authority requirements.

The site has been assessed for suitability for applying for SuDS (Sustainable Drainage Systems) measures for the development. The principal outcome of the study found that infiltration measures are suitable for the site.

A number of SuDS measures will also be implemented i.e. rainwater butts and soakaway. The surface water on the site will discharge to a soakaway via an oil interceptor. The soakaway will have a storage volume suitable for the infiltration test results.

Infiltration testing in accordance with BRE365 was carried out by IGSL Geotechnical Ltd. The geotechnical investigations included 2 infiltrations tests which gave results of 0.0003 & 0.0005m/min. It is proposed to use a soakaway on the southern side of the site to dispose of stormwater from the proposed development. It is recommended to install a soakaway to approximately 2m depth on the southern side of the site. The proposed soakaway is designed for a 10yr storm with 10% allowance for climate change. The proposed plan area of the soakaway is 15m x 5m and minimum required depth of the soakaway is 962mm, therefore a 1100mm deep system is selected.

The soil infiltration rate is taken from the site testing in accordance with BRE365 undertaken by IGSL Geotechnical Ltd.

Surface water drawings are included in **Appendix 2**.

3.4 Foul Wastewater discharge

The new site proposal includes 8 dwellings. IW records and the Murphy surveys utility survey show a 300mm foul sewer on the main public road on the northern end of Millview Terrace- it is proposed to build a new sewer for approximately 70m through the exsiting road serving Millview Terrace. It is proposed to build a new manhole on the 300mm existing sewer at the proposed connection point.

Sewers carrying domestic wastewater from this proposed housing development should be designed to carry a minimum wastewater volume of six times dry weather flows (6DWF).

Dry weather flows (DWF) is taken as 900 litres per dwelling (four persons per house and a per capita wastewater flow of 225 litres per head per day).

Total Dry weather flow (DWF) = 8 x 900/24/60/60 = 0.083l/s

Foul Pipe Network is designed to carry a minimum wastewater volume of six times dry weather flows (6DWF).

6 DWF = 6 x 0.083 = 0.5 l/s

4. Screening

4.1 Introduction

This section contains the information required for the competent authority to undertake screening for AA for the proposed development.

The aims of this section are to:

- Determine whether the proposed development is directly connected with, or necessary to, the conservation management of any European Sites (also known as Natura 2000 Sites);
- Provide information on, and assess the potential for the proposed development to significantly effect on European sites; and
- Determine whether the proposed development, alone or in combination with other projects, is likely to have significant effects on European sites in view of their conservation objectives.

The proposed development is not directly connected with, or necessary to the conservation management of any European sites.

4.2 Zone of Impact

The likely Zone of Impact (ZoI) comprises the area within which the proposed development may potentially affect the conservation objectives or qualifying interests (QI) of a European site. There is no recommended likely Zone of Impact, and guidance from the National Parks and Wildlife Service (NPWS) and CIEEM (2018) recommends that the distance should be evaluated on a case-by- case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects (cumulative).

In ecological and environmental impact assessment, for an effect to occur there must be a risk enabled by having a source (e.g., construction works at a proposed development site), a 'receptor' (e.g., SAC or other ecologically sensitive feature), and a pathway between the source and the receptor (e.g. a watercourse which connects the proposed development site to the SAC). A 'receptor' is defined as the Special Conservation Interest (SCI) of SPAs or Qualifying Interest (QI) of SACs for which conservation objectives have been set for the European sites being screened.

Consideration is therefore given to the source-pathway-receptor linkage and associated risks between the proposed development and European sites. For a significant effect to occur there needs to be an identified risk whereby a source (e.g., contaminant or pollutant arising from construction activities) affects a particular receptor (i.e. European site) through a particular pathway (e.g. a watercourse which connects the proposed development with the European site).

The identification of risk does not automatically mean that an effect will occur, nor that it will be significant. The identification of these risks means that there is a possibility of environmental or ecological damage occurring. The level and significance of the effect

depends upon the nature of the consequence, likelihood of the risk and characteristics of the receptor.

The precautionary principle is applied for the purposes of screening to ensure that consideration and pre-emptive action is undertaken where there is a lack of scientific evidence. It is noted that mitigation measures are not taken into account in the AA screening assessment process.

4.3 Field Study

A site walkover survey was carried out on the 2nd of July 2024 to identify the habitats, flora and fauna present at the site. Surveys relevant to this AA screening report are discussed below. The surveys assessed the potential for all Qualifying Interests (QIs)/ Special Conservation Interests (SCIs) of European sites and third schedule invasive species to occur within the proposed site.

4.4 Source-Pathway-Receptor Model

The likely effects of the proposed development on any European site have been assessed using a source-pathway-receptor model, where:

- A ‘source’ is defined as the individual element of the proposed development that has the potential to impact on a European site, its qualifying features and its conservation objectives.
- A ‘pathway’ is defined as the means or route by which a source can affect the ecological receptor.
- A ‘receptor’ is defined as the SCI of SPAs or QI of SACs for which conservation objectives have been set for the European sites being screened.

A source-pathway-receptor model is a standard tool used in environmental assessment. In order for an effect to be likely, all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism results in no likelihood for the effect to occur. The source-pathway-receptor model was used to identify a list of European sites, and their QIs/SCIs, with potential links to European sites. These are termed as ‘relevant’ European sites/QIs/SCIs throughout this report.

4.5 Likely Significant Effect

The threshold for a Likely Significant Effect (LSE) is treated in the screening exercise as being above a de minimis level. The opinion of the Advocate General in CJEU case C-258/11 outlines:

“the requirement that the effect in question be ‘significant’ exists in order to lay down a de minimis threshold. Plans or projects that have no appreciable effect on a European site are thereby excluded.

If all plans or projects capable of having any effect whatsoever on the site were to be caught by Article 6(3), activities on or near the site would risk being impossible by reason of legislative overkill.”

In this report, therefore, 'relevant' European sites are those within the potential ZoI of activities associated with the construction and operation of the proposed development, where LSE pathways to European sites were identified through the source-pathway-receptor model.

4.6 Screening Process

The Screening for Appropriate Assessment will incorporate the following steps:

Definition of the likely Zone of Impact for the proposed development;

- Identification of the European sites that are situated (in their entirety or partially or downstream) within the likely Zone of Impact of the proposed development;
- Identification of the most up-to-date QIs and SCIs for each European site within the likely Zone of Impact;
- Identification of the environmental conditions that maintain the QIs/SCIs at the desired target of Favourable Conservation Status;
- Identification of the threats/impacts – actual or potential that could negatively impact the environmental conditions of the QIs/SCIs within the European sites;
- Highlighting the activities of the proposed development that could give rise to significant negative impacts; and
- Identification of other plans or projects, for which in-combination impacts would likely have significant effects.

4.7 Desktop Review

A desktop review facilitates the identification of the baseline ecological conditions and key ecological issues relating to European sites and facilitates an evaluation assessment of potential in-combination impacts. Sources of information used for this report include reports prepared for the Drispey area and information from statutory and non-statutory bodies. The following sources of information and relevant documentation were utilised:

- National Parks & Wildlife Service (NPWS) - www.npws.ie
- Environmental Protection Agency (EPA) – www.epa.ie
- National Biodiversity Data Centre (NBDC) – www.biodiversityireland.ie
- *Cork County Development Plan 2022-202*8;
- Birdwatch Ireland - http://www.birdwatchireland.ie/
- Invasive Species Ireland - http://www.invasivespeciesireland.com/
- *Best Practice Guidance for Habitat Survey and Mapping* (Heritage Council, 2011)
- *Guidelines for Assessment of Ecological Impacts of National Road Schemes* (National Roads Authority, 2009) and
- *Environmental Impact Assessment of Projects Guidance on the preparation of the Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU)* European Union, 2017.

5. European Sites

5.1 Designated sites within Zone of Impact

In accordance with the European Commission Methodological Guidance (EC 2018), a list of European sites that can be potentially affected by the proposed development has been compiled. All candidate SAC's (cSAC) and SPAs sites within the likely Zone of Impact of the proposed development have been identified in **Table 1** and shown in **Figure 3**.

The proposed development site does not overlap with any European sites and there are no European sites located within the vicinity. The closest European site is the Gearagh SAC which is located 14.9km southwest. The proposed development site is potentially hydrologically connected to one European site i.e. Cork Harbour SPA, which is located 23.8km southeast of the proposed development site. The Dripsey Stream, a 1st order tributary of the River Lee is located c.180m west of the proposed development site. The River Lee meets Cork Harbour SPA c. 27.7km downstream of the proposed development site. Although unlikely given the distances involved, there is potential hydrological connection between the proposed development site and Cork Harbour SPA.

Wastewater from the site will ultimately discharge into River Lee via the Dripsey Wastewater treatment plant (WWTP) approximately 27.6km upstream of Cork Harbour SPA. Although unlikely given the distances involved, this could potentially impact on water quality within the Cork Harbour SPA.

Although unlikely given the distance involved, surface water run-off during the construction or operational phases as well as wastewater discharges from the proposed development could potentially impact on Cork Harbour SPA via the Drispey Stream and River Lee. Given the distance from Cork Harbour SPA, the proposed development site will not provide significant *ex-situ* habitats for SCI birds of Cork Harbour SPA or any other European site.

Therefore, a source-pathway-receptor link has been identified between the source (proposed development) and the receptor (Cork Harbour SPA) via a potential pathway (surface water and wastewater discharges during operation). Further information on the Cork Harbour SPA is provided below and a full site synopsis included **Appendix 1**.

Given the distances involved and/or the lack of significant hydrological connection, no potential pathway for impact has been identified between the proposed development and any other European site.

Table 1. Designated sites and their location relative to the proposed development site

European sites name and code	Distance from site boundary (at closest point) and potential source-pathway-receptor link	Qualifying interests (QI)/ Special Conservation Interests (SCI)
Special Area of Conservation (SAC)		
The Gearagh SAC (site code 00108)	14.9km southwest. Located upstream of the proposed development site and no hydrological or other pathway to this site. Given the distance from the proposed development site and absence of significant pathways for impact, this site has been screened out from further assessment.	3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation 3270 Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) 1355 *Lutra lutra* (Otter)
Special Protection Area (SPA)		
Cork Harbour SPA (site code 004030)	23.8km southeast (27.7km downstream) The Drispey Stream, a 1st order tributary of the River Lee is located c.180m west of the proposed development site. The River Lee meets Cork Harbour SPA c. 27.7km downstream of the proposed development site. Although unlikely given the distances involved, there is potential hydrological connection between the proposed development site and Cork Harbour SPA. Therefore, although unlikely, surface water run-off during the construction or operational phases could potentially flow into the Cork Harbour SPA via the Knockaneowen Stream. Wastewater from the site will ultimately discharge into Dripsey Stream via the Dripsey Wastewater treatment plant (WWTP) approximately 27.6km upstream of Cork Harbour SPA. This could potentially impact on water quality within the Cork Harbour SPA. Although unlikely given the distance involved, surface water run-off/discharges during the construction or operational phases as well as wastewater discharges	**Birds** A193 Common Tern (*Sterna hirundo*) A028 Grey Heron (*Ardea cinerea*) A130 Oystercatcher (*Haematopus ostralegus*) A140 Golden Plover (*Pluvialis apricaria*) A157 Bar-tailed Godwit (*Limosa lapponica*) A056 Shoveler (*Anas clypeata*) A156 Black-tailed Godwit (*Limosa limosa*) A052 Teal (*Anas crecca)* A183 Lesser Black-backed Gull (*Larus fuscus)* A054 Pintail (*Anas acuta*) A149 Dunlin (*Calidris alpina*) A017 Cormorant (*Phalacrocorax carbo*) A162 Redshank (*Tringa totanus*) A004 Little Grebe (*Tachybaptus ruficollis*) A050 Wigeon (*Anas penelope*) A160 Curlew (*Numenius arquata*)

European sites name and code	Distance from site boundary (at closest point) and potential source-pathway-receptor link	Qualifying interests (QI)/ Special Conservation Interests (SCI)
	from the proposed development could potentially impact on Cork Harbour SPA via the Drispey Stream and River Lee.	A005 Great Crested Grebe (*Podiceps cristatus*) A069 Red-breasted Merganser (*Mergus serrator*) A048 Shelduck (*Tadorna tadorna*) A142 Lapwing (*Vanellus vanellus*) A179 Black-headed Gull (*Chroicocephalus ridibundus*) A182 Common Gull (*Larus canus*) A141 Grey Plover (*Pluvialis squatarol*a) **Habitats** Wetlands

Figure 3. European sites within likely zone of impact of proposed development site | Source EPA Envision mapping | Not to scale

5.2 Cork Harbour SPA (site code 004030) Site Synopses

Cork Harbour is a large, sheltered bay system, with several river estuaries - principally those of the Rivers Lee, Douglas, Owenboy and Owennacurra. The SPA site comprises most of the main intertidal areas of Cork Harbour, including all of the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay, Ringabella Creek and the Rostellan and Poulnabibe inlets.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Little Grebe, Great Crested Grebe, Cormorant, Grey Heron, Shelduck, Wigeon, Teal, Mallard, Pintail, Shoveler, Redbreasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Greenshank, Blackheaded Gull, Common Gull, Lesser Black-backed Gull and Common Tern. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

Cork Harbour has a nationally important breeding colony of Common Tern (102 pairs in 1995). The birds have nested in Cork Harbour since about 1970, and since 1983 on various artificial structures, notably derelict steel barges and the roof of a Martello Tower.

A full site synopsis for the Cork Harbour SPA is included as **Appendix 1** of this report.

5.3 European sites – Features of interests and conservation objectives.

The EU Habitats Directive contains a list of habitats (Annex I) and species (Annex II) for which SACs must be established by Member States. Similarly, the EU Birds Directive contains lists of important bird species (Annex I) and other migratory bird species for which SPAs must be established. Those that are known to occur at a site are referred to as ‘qualifying interests’ and are listed in the Natura 2000 forms which are lodged with the EU Commission by each Member State. A ‘qualifying interest (QI)’ (or ‘special conservation interest (SCI)’ in the case of SPAs) is one of the factors (such as the species or habitat that is present) for which the site merits designation. The National Parks and Wildlife Service (NPWS) are responsible for the designation of SACs and SPAs in Ireland.

The conservation objectives for Cork Harbour SPA site are detailed in: NPWS (2014) *Conservation Objectives: Cork Harbour SPA 004030. Version 1.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and SACs and SPAs are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network. European and national legislation places a collective obligation on Ireland and its citizens to maintain at favourable conservation status sites designated as SACs and SPAs. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

The maintenance of habitats and species within European sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level. Favourable conservation status of a habitat is achieved when its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that 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 species and habitats listed as SCIs for the Cork Harbour SPA and specific conservation objectives are included in **Table 2**.

Table 2. Special Conservation Interests (SCIs) for Cork Harbour SPA

Species code	Species		Conservation objective
A056	Shoveler	*Anas clypeata*	Maintain
A149	Dunlin	*Calidris alpina*	Maintain
A140	Golden Plover	*Pluvialis apricaria*	Maintain
A050	Wigeon	*Anas penelope*	Maintain
A028	Grey Heron	*Ardea cinerea*	Maintain
A069	Red- breasted merganser	*Mergus serrator*	Maintain
A142	*Lapwing*	*Vanellus vanellus*	Maintain
A130	O*ystercatcher*	*Haematopus ostralegus*	Maintain
A141	Grey plover	*Pluvialis squatarola*	Maintain
A052	Teal	*Anas crecca*	Maintain
A054	Pintail	*Anas acuta*	Maintain
A157	Bar-tailed Godwit	*Limosa lapponica*	Maintain
A162	Redshank	*Tringa totanus*	Maintain
A183	Lesser Black-backed gull	*Larus fuscus*	Maintain
A179	Black-headed Gull	*Chroicocephalus ridibundus*	Maintain
A004	Little Grebe	*Tachybaptus ruficollis*	Maintain
A160	Curlew	*Numenius arquata*	Maintain
A182	Common Gull	*Larus canus*	Maintain
A048	Shelduck	*Tadorna tadorna*	Maintain
A017	Cormorant	*Phalacrocorax carbo*	Maintain
A193	Common Tern	*Sterna hirundo*	Maintain
A005	Great crested grebe	*Podiceps cristatus*	Maintain
A156	Black-tailed Godwit	*Limosa limosa*	Maintain
A999	Wetlands and waterbirds		Maintain

Restore = Restore favourable conservation condition, Maintain = Maintain favourable conservation condition

To acknowledge the importance of Ireland's wetlands to wintering waterbirds, “Wetland and Waterbirds” may be included as a Special Conservation Interest for some SPAs that have been designated for wintering waterbirds and that contain a wetland site of significant importance to one or more of the species of Special Conservation Interest. Thus, a further objective is to maintain or restore the favourable conservation condition of the wetland habitat within the Cork Harbour SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

5.4 Status of qualifying interests for the Cork Harbour SPA

Cork Harbour SPA is a large, sheltered bay system that is an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterfowl, for which it is amongst the top ten sites in the country. Owing to the sheltered conditions, the intertidal flats are often

muddy in character but described principally as 'mixed sediment to sandy mud with polychaetes and oligochaetes'. These muds support a range of macro-invertebrates, notably *Macoma balthica, Scrobicularia plana, Peringia (Hydrobia) ulvae, Nepthys hombergi, Nereis diversicolor* and *Corophium volutator*, all of which provide a food source for many wintering waterbird species. Salt marshes are scattered through the site and these provide high tide roosts for waterbirds (NPWS 2014b).

The specific conservation objectives for the species listed as conservation interests for the Cork Harbour SPA (**Table 3**) are to maintain a favourable conservation condition of the non-breeding/breeding waterbirds and to maintain the favourable conservation condition of the wetland habitat at Cork Harbour SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

Table 3. SCI species for which a potential impact has been identified – specific targets

Species/Habitats	Attribute	Measure	Target
Little Grebe Great Crested Grebe Cormorant Grey Heron Shelduck	Population trend	Percentage change	Long term population trend stable or increasing
Wigeon Teal Pintail Shoveler Red-breasted Merganser Oystercatcher Golden Plover Grey Plover Lapwing Dunlin Black-tailed Godwit Bar-tailed Godwit Curlew	Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by each species, other than that occurring from natural patterns of variation

Species/Habitats	Attribute	Measure	Target
Redshank Black-headed Gull Common Gull Lesser Black-backed Gull			
Common Tern	Breeding population abundance: apparently occupied nests (AONs)	Number	No significant decline
	Productivity rate: fledged young per breeding pair	Mean number	No significant decline
	Distribution: breeding colonies	Number; location; area (hectares)	No significant decline
	Prey biomass available	Kilogrammes	No significant decline
	Barriers to connectivity	Number; location; shape; area (hectares)	No significant increase
	Disturbance at the breeding site	Level of impact	Human activities should occur at levels that do not adversely affect the breeding common tern population
Wetlands	Habitat area	Hectares	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,587 hectares, other than that occurring from natural patterns of variation

The Conservation Objectives Supporting document for Cork Harbour SPA (NPWS, 2014c) provides a review of the site conservation condition and population trends for Cork Harbour SPA with regard to species' all-Ireland and international trends. All-Ireland trends follow I-WeBS data 1994-2015 (Birdwatch Ireland 2022) while International trends follow Wetlands

International (2012). The conservation status of Cork Harbour SPA's SCI birds are included in **Table 4**.

Table 4. Conservation Status of SCI species within Cork Harbour

Special Conservation Interests	BoCCI Category [1]	Site conservation condition[2]	Current All-Ireland Trend[3]	Current International Trend[4]
Shelduck	Amber	Unfavourable	Declining	Increasing
Wigeon	Amber	Unfavourable	Declining	Stable
Teal	Amber	Intermediate (Unfavourable)	Stable	Increasing
Pintail	Amber	Highly unfavourable	Stable	Increasing
Shoveler	Red	Highly unfavourable	Stable	Increasing
Red-breasted Merganser	Amber	Highly unfavourable	Stable	n/c
Little Grebe	Green	Favourable	Increasing	Increasing
Great Crested Grebe	Amber	Unfavourable	Stable	Declining?
Cormorant	Amber	Highly unfavourable	Stable	Increasing
Grey Heron	Green	Intermediate	Stable	Increasing
Oystercatcher	Red	Intermediate (unfavourable)	Stable	Declining
Golden Plover	Red	Favourable	Declining	Declining
Grey Plover	Red	Highly unfavourable	Declining	Declining?
Lapwing	Red	Highly unfavourable	Declining	Stable
Dunlin	Red	Unfavourable	Declining	Stable
Black-tailed Godwit	Red	Favourable	Increasing	Increasing
Bar-tailed Godwit	Red	Favourable	Stable	Increasing
Curlew	Red	Unfavourable	Declining	Declining
Redshank	Red	Unfavourable	Stable	Stable/increasing
Black-headed Gull	Amber	Highly unfavourable	n/c	n/c
Common Gull	Amber	Highly unfavourable	n/c	n/c
Lesser Black-backed Gull	Amber	Highly unfavourable	n/c	n/c

1. Gilbert et al. 2021. 2. NPWS, 2014c, 3. Birdwatch Ireland I-WeBS 1994-2015, 4. Wetlands International (2012)

6. Water Quality

6.1 River Basin Management Plan for Ireland 2022-2027 (3rd Cycle)

The Water Framework Directive (WFD) sets out the environmental objectives which are required to be met through the process of river basin planning and implementation of those plans. Specific objectives are set out for surface water, groundwater and protected areas. The challenges that must be overcome in order to achieve those objectives are very significant. Therefore, a key purpose of the River Basin Management Plan (RBMP) is to set out priorities and ensure that implementation is guided by these priorities.

The EPA has published an updated draft Catchment Assessment for each of our 46 catchments. These assessments provide an overview of the situation in the catchment, draw comparison between Cycle 2 and Cycle 3, and will help support the draft River Basin Management Plan 2022-2027 public consultation process. The third cycle RBMP, which was published in July 2022, aims to build on the progress made during the second cycle. Key measures during the first cycle included the licensing of urban waste-water discharges (with an associated investment in urban waste-water treatment) and the implementation of the Nitrates Action Programme (Good Agricultural Practice Regulations). The former measure has resulted in significant progress in terms both of compliance levels and of the impact of urban wastewater on water quality. The latter provides a considerable environmental baseline which all Irish farmers must achieve and has resulted in improving trends in the level of nitrates and phosphates in rivers and groundwater. It is acknowledged, however, that sufficient progress has not been made in developing and implementing supporting measures during the first and second cycles.

Overall, RBMP assesses the quality of water in Ireland and presents detailed scientific characterisation of our water bodies. The characterisation process also takes into account wider water quality considerations, such as the special water-quality requirements of protected areas. The characterisation process identifies those water bodies that are *At Risk* of not meeting the objectives of the WFD, and the process also identifies the significant pressures causing this risk. Based on an assessment of risk and pressures, a programme of measures has been developed to address the identified pressures and work towards achieving the required objectives for water quality and protected areas. Data relating to the watercourses in the vicinity of the proposed development site are provided in **Table 5** and the location of these shown in **Figure 4.** While waterbodies in the vicinity of the proposed development site i.e. Lee (Cork)_080 (Knockaneowen Stream) and the Iniscarra area of the River Lee were classified as 'At Risk' during the 2nd Cycle of the WFD, during the 3rd cycle these have been upgraded to 'Not at risk' with a 'Good' water quality status.

Table 5. River Basin Management Plan (RBMP) data

Catchment: Lee, Cork Harbour and Youghal Bay (Code 19)
This catchment includes the area drained by the River Lee and all streams entering tidal water in Cork Harbour and Youghal Bay and between Knockaverry and Templebreedy Battery, Co. Cork, draining a total area of 2,153km². The largest urban centre in the catchment is Cork City. The other main urban centres in this catchment are Ballincollig, Macroom, Carrigaline, Crosshaven, Blarney, Glanmire, Midleton, Carrigtohill, Cobh, Passage West and Belvelly. The total population of the catchment is approximately 328,854 with a population density of 153 people per km². Several small coastal rivers drain the area to the southeast of Cork Harbour and the area at the eastern extreme of the catchment is drained by the Womanagh River which flows into the sea on the western side of Youghal Bay. The Lee-Cork Harbour catchment comprises 18 sub-catchments with 92 river water bodies, three lakes, 13 transitional, six coastal water bodies and 16 groundwater bodies. There are five heavily modified and no artificial water bodies in the catchment. The proposed development site is located within the Lee[Cork]_SC_040 sub catchment. **Summary of WFD 2nd Cycle.**

Catchment: Lee, Cork Harbour and Youghal Bay (Code 19)				
Two out of four river water bodies within this sub-catchment are AT RISK: Dripsey_010 due to Poor biological status; Lee (Cork)_080 due to Moderate biological status. One lake water body is AT RISK, Inniscarra due to Moderate biological status (driven by chlorophyll, phytoplankton and macrophytes). The significant issues within Dripsey_010 were identified as siltation and elevated nutrients from forestry activities (both clearfelling and aerial fertilisation). Waste water treatment may be impacting nutrient concentrations within Dripsey_010. *Recycling of nutrients from lake sediments is a likely significant pressure within Inniscarra. In addition Inniscarra is a Heavily Modified water body created by the damming of the River Lee with Carrigdrohid Dam. Lee (Cork)_080 may also be impacted by this impoundment.*				
Waterbodies relevant to the proposed project (3rd Cycle)				
Waterbody	**WFD Risk**	**WFD Status (2016-2021)**	**Significant Pressure**	**Pressure Category**
Dripsey_020	Review	High	No	-
Iniscarra	Not at risk	Good	No	-
Lee Cork Estuary Upper	At risk	Poor	Yes	Urban runoff, urban wastewater
Lee Cork Estuary Lower	At risk	Moderate	Yes	Urban runoff, urban wastewater
Lough Mahon	At risk	Moderate	Yes	Urban runoff, urban wastewater

Source: EPA envision mapping and www.catchments.ie

Figure 4. WFD status (2016-2021) of waterbodies in the vicinity of the proposed development | Source: EPA Envision mapping https://gis.epa.ie/EPAMaps/) | not to scale

6.2 Urban Wastewater Treatment Directive

The Wastewater Discharge (Authorisation) Regulations 2007 (S.I. 684 of 2007) gives effect to the requirements of the Urban Wastewater Treatment Directive (Directive 91/271/EEC) and the Water Framework Directive (2000/60/EC) in Ireland. The Urban Wastewater Treatment Directive (UWWTD) lays down the requirements for the collection, treatment and discharge of urban wastewater and specifies the quality standards which must be met — based on agglomeration size — before treated wastewater is released into the environment.

The priority objective for this river basin planning cycle is to secure compliance with the Urban Wastewater Treatment Directive and to contribute to the improvement and protection of waters in keeping with the water-quality objectives established by this Plan. Achieving this objective entails addressing waste-water discharges and overflows where protected areas (i.e., designated bathing waters, shellfish waters and Freshwater Pearl-Mussel sites) or high-status waters are at risk from urban waste-water pressures.

As part of the proposed development wastewater discharging from the proposed development will be conveyed to the Drispey WWTP (D0426-02) for treatment prior to discharging into the Drispey Stream.

7. Site Survey

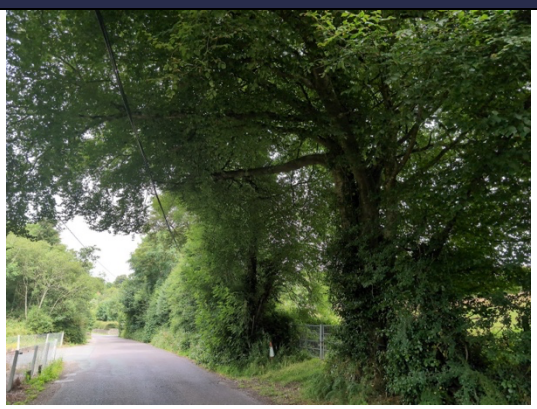
A site walkover survey was carried out on the on the 2nd of July 2024. The habitats within or adjacent to the proposed development site were classified using the classification scheme outlined in the Heritage council publication *A Guide to Habitats in Ireland* (Fossitt, 2000) and cross referenced with Annex I/qualifying habitats, where required. No rare species or habitats were recorded within the proposed development site. Habitats recorded within the proposed development site are detailed in **Table 6** and illustrated in **Figure 5**.

Table 6. Habitats recorded within proposed development site

Habitat	Comments
Treeline WL2/Hedgerow WL1/Dry meadows and grassy verge GS2	Along the eastern boundary of the proposed development site is an overgrown hedgerow which has developed into a treeline. This boundary is dominated by Hawthorn with occasional Holly. One semi-mature Ash with evidence of Ash dieback disease was recorded. Dry meadows and grassy verge habitat is present along the base on this treeline/hedgerow. Species recorded in this habitat include Hogweed, Nettle, Bindweed, False oat grass, Field thistle and Bramble. GS2 has links with Annex I: Corresponds to the annexed habitat, 'lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) (6510)'. However the area of this habitat within the proposed development site is not a good example of this Annex I habitat.  **Plate 1. Treeline/hedgerow and grassy verge at east of proposed development site**
Improved agricultural grassland GA1/Dry meadows and grassy verge GS2	Most of the site is dominated by improved agricultural grassland, which in the absence of significant intensive grazing also has elements of dry meadow and grassy verge and it is relatively diverse. Species noted include Sweet vernal grass, Ribwort plantain, Yorkshire fog, False oat grass, Ribwort Plantain, Yorkshire fog, False oat grass, Meadow vetchling, Sorrel, Red clover, Bent grass, Common mouse ear, Selfheal, Creeping buttercup. GS2 has links with Annex I: Corresponds to the annexed habitat, 'lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) (6510)'. However the area of this habitat within the proposed development site is not a good example of this Annex I habitat.

Habitat	Comments
	 **Plate 2. Grassland covers most of the site**  **Plate 3. Unmanaged grassland habitat**
Buildings and artificial surfaces BL3	The proposed development site will be accessed via the existing roadway for Millview Terrace.
Treeline WL2 (outside proposed development site)	At the southwest corner of the land ownership boundary (outside the proposed development site), there is a small area of mature treeline with mature Alder and Ash as well as Hawthorn and Willow in the understory. The trees within this boundary are largely located outside the land ownership boundary (outside palisade fencing) but are overhanging the site. Understory species within this area include Herb Robert, Bramble, Remote sedge, False oat grass, Hogweed, Ivy, Cleavers, Male fern, Foxglove, Nettle.

Habitat	Comments
	 **Plate 4. Treeline overhanging land ownership boundary**  **Plate 5. Large ash tree along this field boundary**

Habitat	Comments
	 **Plate 6. Access to the land ownership boundary via gateway along Mill Road.**
Dry meadows and grassy verges GS2 (outside proposed development site)	An area of overgrown dry meadows and grassy verge runs through the grassland at the northwest side of the landownership boundary along a chain link fence. GS2 has links with Annex I: Corresponds to the annexed habitat, 'lowland hay meadows (*Alopecurus pratensis, Sanguisorba officinalis*) (6510)'. However the area of this habitat within the proposed development site is not a good example of this Annex I habitat.  **Plate 7. Overgrown dry meadows and grassy verge habitat along chain link fence.**

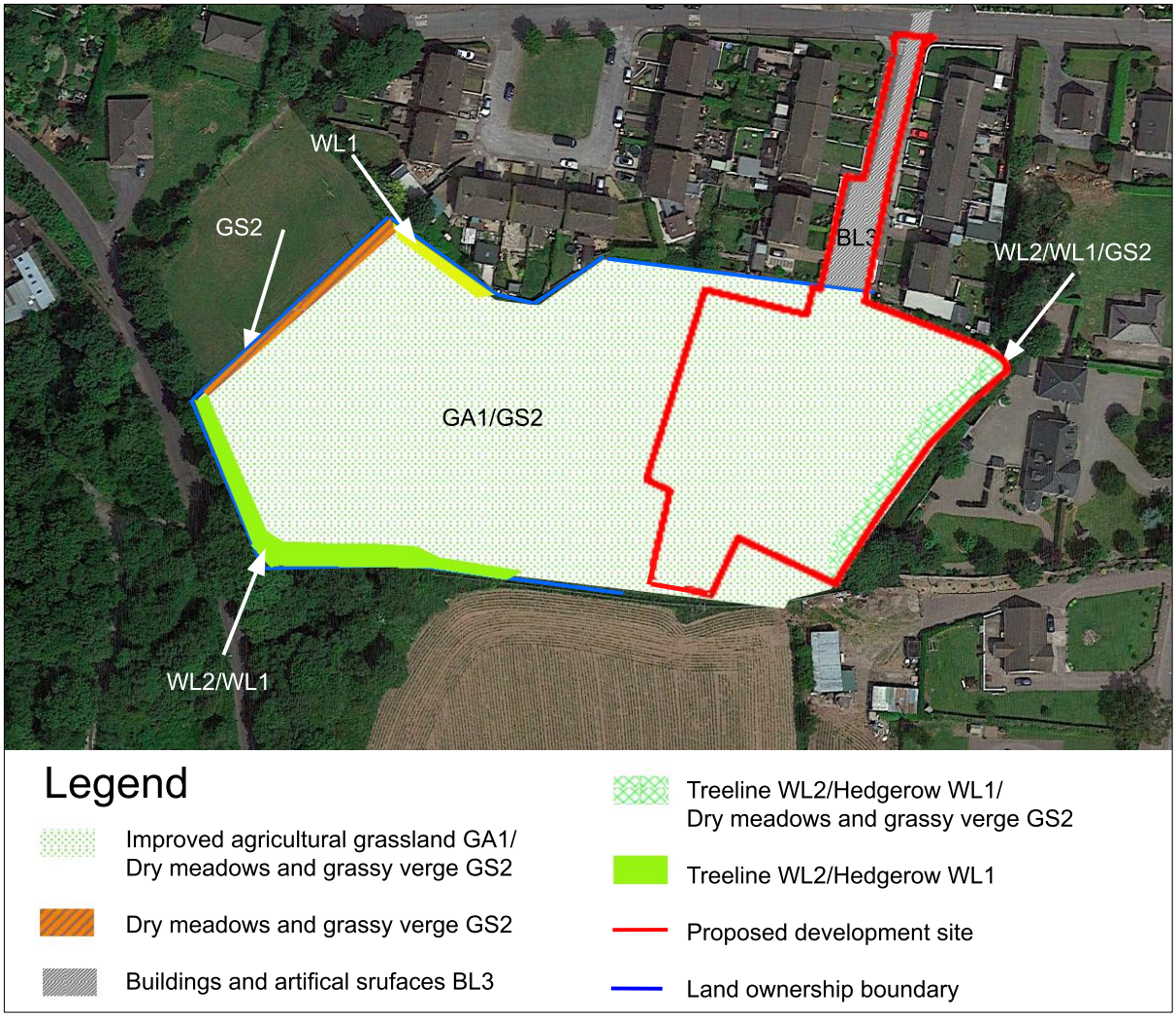


Figure 5. Habitats recorded within proposed development site

8. Potential Impacts

Potential impacts relate to habitat loss, changes to water quality (during construction and operation), the spread of invasive species and disturbance effects during the proposed works. Based on the *Managing Natura 2000 Sites: The Provision of Article 6 of the Habitats Directive 92/43/EEC* (European Commission (EC), 2018 and CIEEM guidelines '*Guidelines for Ecological Impact Assessment*' (CIEEM, 2019) impacts are listed as significant using a combination of professional judgement and criteria or standards where available, if impacts have the potential to have a significant impact on the ecological integrity on the habitats and species for which the site is designated.

The potential impacts associated with the proposed works are discussed in the following sections with respect to their likelihood to have significant impacts on European sites.

As part of the assessment direct, indirect and in-combination impacts on all relevant QIs/SCIs were considered. Direct impacts refer to habitat loss or fragmentation arising from land-take requirements for development. Indirect and secondary impacts do not have a straight-line route between cause and effect, and it is potentially more challenging to ensure that all the

possible indirect impacts of the project/plan - in combination with other plans and projects have been established.

Potential impacts were identified as follows:

- Potential impacts from loss of habitat
- Potential impacts from noise and disturbance
- Potential impacts from surface water runoff
- Potential impacts from wastewater discharges
- Spread of invasive species
- In-combination impacts

8.1 Potential impacts from loss of habitat

The works area is located over 14km from the closest European site. An ecological appraisal of the site indicates that it supports common habitats which are not of high value in the context of European designations. The habitats recorded within the proposed development site are common i.e. grassland and treeline/hedgerow and do not correspond to habitats listed on Annex I of the Habitats Directive.

In a recent study around Cork Harbour (NIS for the M28 Cork to Ringaskiddy Project (RPS 2017)) a detailed study was carried out on grasslands in the vicinity of the Harbour to determine the value of these habitats for roosting and foraging SCI birds. This study found that while SCI birds occasionally used fields, they found that these grassland areas are not routinely used as a feeding habitat for the SCI species associated with Cork Harbour SPA. In addition, this study concluded that there is, effectively, an unlimited supply of potentially suitable grassland habitat in the vicinity of Cork Harbour, although there may be variations in habitat quality.

In the absence of any specific European or Irish guidance in relation to establishing ecological connectivity to SPAs NatureScot (SNH, 2016) was consulted. This document provides guidance in relation to the identification of ecological connectivity between development sites and SPAs. The guidance takes into consideration the distances species may travel beyond the boundary of relevant SPAs and provides information on dispersal and foraging ranges of bird species which are frequently encountered when considering plans and projects. It goes on to state that *"in most cases the core range should be used when determining whether there is connectivity between the proposal and the qualifying Interests"*. Where SPAs are at greater distance from the site than the core foraging distances for their listed Special Conservation Interest (SCI) species, there is no likely ecological connectivity to the development and so the SPAs are outside the likely Zone of Impact.

Core ranges are not available for all SCI species of Cork Harbour SPA. However, the following may be indicative or core range for other wading birds. According to NatureScot guidance (SNH, 2016), the core foraging distances of Dunlin is 500m (max 3km), Curlew 1km (max 2km) and Golden Plover 2km (max 11km). Given there are no wetland features of significance of the site, ducks and diving SCI species will not forage at the site e.g. Cormorant, Little Grebe, Great Crested Grebe, Common Tern. Based on the above, the proposed development site is essentially outside the core range for SCI birds of Cork Harbour SPA.

There is nothing to differentiate the grassland habitats within the proposed development site from other similar habitats in the vicinity and at this distance from the SPA boundary they could not represent critical foraging or roosting habitat for the SCI birds of Cork Harbour SPA. Given the availability of large areas of similar habitat in the immediate vicinity and wider area, there will be no impact on SCI from loss of foraging or roosting habitat. Considering its distance from the SPA, the core ranges of SCI birds and the absence of wetland habitats in the vicinity, this site does not provide critical roosting or foraging habitat for SCI birds. The proposed development will not result in any significant loss of *ex situ* foraging or roosting habitat for SCI birds for the Cork Harbour SPA.

Considering the above, there will be no significant impact on European sites from loss of habitat due to the proposed development.

8.2 Potential impacts from noise and disturbance

Potentially increased noise and disturbance associated with the site works could cause disturbance/displacement of fauna. If of sufficient severity, there could be impacts on reproductive success. Disturbance can cause sensitive species, such as birds, to deviate from their normal, preferred behaviour, resulting in stress, increased energy expenditure and, in some cases, species mortality.

The potential effects and impacts of disturbance have been widely recognised in wildlife conservation legislation, as has the need to develop conservation measures for birds whilst taking human activities into account. Article 4.4 of the Bird's Directive (79/409/EEC) requires member states to "*take appropriate steps to avoid… any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article*". This specifically relates to conservation measures concerning Annex I species.

The wintering birds listed as qualifying interests for the Cork Harbour SPA are strongly associated with estuarine shoreline areas or wetlands - habitat types absent from the proposed development area.

It is noted that the proposed development area is located 23.8km from the SPA boundary. As noted in **Section 8.1**, this area does not provide critical habitat for SCI birds. Given the absence of valuable habitats within and in the vicinity of the site, any increases in disturbance at the site during construction and operation will not impact on SCI birds.

No valuable habitat for SCI species was recorded within or adjacent to the proposed development area. The construction phase of the project will increase noise and disturbance. However, given the lack of valuable habitat for SCI species on or near the proposed development area no impact on birds listed as qualifying interests for the Cork Harbour SPA is predicted to occur.

8.3 Potential impacts from surface water runoff

Potential impacts on aquatic habitats which can arise from surface water emissions associated with the construction phase of the proposed development include increased silt levels in surface water run-off, inadvertent spillages of hydrocarbons from fuel and hydraulic fluid and spillage of cementous materials.

Silt-laden stormwater run-off during site preparation, site clearance and construction of site access roads as well as spillages of fuel and oil and concrete / cement run-off could potentially impact on water quality within the Dripsey Stream and receptors downstream of the proposed development site. However, as noted above, Cork Harbour SPA is located c.27.7km downstream of the site. The small scale of the proposed development there is no potential for significant siltation and hydrocarbon runoff during construction. Given the distance downstream and the dilution available, there is no potential for significant impacts on water quality within Cork Harbour SPA.

During operation SuDS measures are proposed for the development in accordance with the guidance from the County Development Plan 2022 *Advice Note 1 on Surface Water management and the CIRIA SuDS Manual C753*. Surface water drainage includes a gravity fed water collection system (with underground pipes) and SuDS measures i.e. soakaway and water butts). The proposed surface water network is designed for a 10 year storm with 10% allowance for climate change. The site is locally elevated within its environs, it approximately 20m higher than the public road about 150m to the west of the site, therefore pluvial flooding is not deemed a risk. Fluvial flooding is not a risk at the site. The floodplain for the Dripsey Stream is approximately 30m lower than the proposed site.

During operation surface water from the site will discharge to an underground infiltration tank. There will be no direct discharges to local surface waters and no potential for impact on Cork Harbour SPA downstream. Therefore, surface water runoff during construction and operation will not impact on the conservation objectives of Cork Harbour SPA.

8.4 Potential impacts from discharges of wastewater during operation

The proposed housing development could potentially result in an increase in nutrients discharging to the River Lee from the Dripsey WWTP (D0426-02). Increased nutrients can potentially impact on freshwater and estuarine habitats by changing baseline ecological conditions and increasing algal growth. Although unlikely given the distance downstream (27.6km), this could impact on feeding success for birds listed as qualifying interests for the Cork Harbour SPA.

Wastewater from the proposed development will be conveyed for treatment to Dripsey WWTP. The Drispey agglomeration is served by a wastewater treatment plant with a Plant Capacity Population Equivalent (P.E.) of 600. The WWTP obtained a discharge licence (Reg: D0426-02) from the EPA and has assigned emission limit values (ELV's) for a range of parameters to ensure a high degree of protection to the Dripsey Stream and surrounding waters.

Treated effluent from the proposed development will discharge from the Dripsey WWTP via the main treated effluent line. The discharge licence assigns ELV's for chemical oxygen demand (COD), total suspended solids (TSS), biological oxygen demand (BOD), Ammonia, pH and orthophosphate. The ELVs are set based on the full design capacity (P.E. 600) and are aimed at providing a high degree of protection to the receiving waterbody and to ensure the receiving waterbody is capable of accommodating the proposed discharge without causing or exacerbating a breach in the relevant standards.

It is noted that the proposed occupancy of the housing development is approximately 21.6 PE (based on 2.7 persons per dwelling). In 2023 the agglomeration PE for Dripsey WWTP was 441 (Base on EPA Envision mapping data). The proposed development would increase the

current WWTP P.E. from 441 to 462.6 which is well within the 600 P.E. design capacity. Thus, given the limited scale of the proposed development and the ability of the WWTP to cater for the additional loading, no impact is expected.

The 2020 AER notes that the final effluent from the Primary Discharge Point was non-compliant with the Emission Limit Values in 2021. The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence for the following: Total Nitrogen mg/l, Ammonia-Total (as N) mg/l at is it noted that an upgrade is required to the WWTP to meet the ELV. This AER also notes that the plant upgrade is ongoing.

In relation to ongoing monitoring of water quality, the 2021 AER also noted the following:

- The WWTP discharge was not compliant with the ELV's set in the wastewater discharge licence.
- The ambient monitoring results does not meet the required EQS. The EQS relates to the Oxygenation and Nutrient Conditions set out in the Surface Water Regulations 2009.
- The discharge from the wastewater treatment plant does not have an observable impact on the water quality.
- The discharge from the wastewater treatment plant does not have an observable negative impact on the Water Framework Directive status.

The addition of the effluent discharge from the proposed housing development to the Dripsey WWTP is well within its design capacity and will not comprise the operational capability of the WWTP to treat effluent to comply with emission limit values. Therefore, the impacts from the proposed development will be negligible given the current operating conditions at the WWTP. Given the distance from Cork Harbour SPA (27.7km upstream), any minor increases in nutrient levels potentially discharged by the WWTP will not have a significant impact water quality within Cork Harbour SPA. Therefore, no impact on water quality within European sites from wastewater discharges is predicted to occur.

8.5 Spread of Invasive Species

No third schedule or any other invasive species were recorded within the proposed development area.

Therefore, there is no risk to Cork Harbour SPA via impacts from the spread of invasive species.

8.6 In-combination Impacts

In-combination impacts refer to a series of individually modest impacts that may in combination produce a significant impact. The underlying intention of this in combination provision is to take account of in-combination impacts from existing or proposed plans and projects and these will often only occur over time. Other developments near site and potential in-combination impacts are identified in **Table 11** In the absence of any significant impacts on qualifying interests or conservation objectives associated with this project no significant in-combination impacts have been identified.

Table 11. Other developments near site and potential in-combination impacts

Plans and Projects	Key Policies/Issues/Objectives Directly Related to the Conservation of the Natura 2000 Network	Impact
River Basin Management Plan 2022-2027	The project should comply with the environmental objectives of the Irish RBMP which are to be achieved generally by 2027. • Ensure full compliance with relevant EU legislation • Prevent deterioration • Meeting the objectives for designated protected areas • Protect high status waters • Implement targeted actions and pilot schemes in focus sub-catchments aimed at: targeting water bodies close to meeting their objective and addressing more complex issues which will build knowledge for the third cycle.	The implementation and compliance with key environmental policies, issues and objectives of this management plan will result in positive in-combination effects to European sites. The implementation of this plan will have a positive impact for the biodiversity. It will not contribute to in-combination or cumulative impacts with the proposed development.
Inland Fisheries Ireland Corporate Plan 2021-2025	To ensure that Ireland's fish populations are managed and protected to ensure their conservation status remains favourable. That they provide a basis for a sustainable world class recreational angling product, and that pristine aquatic habitats are also enjoyed for other recreational uses. To develop and improve fish habitats and ensure that the conditions required for fish populations to thrive are sustained and protected. To grow the number of anglers and ensure the needs of IFI's other key stakeholders are being met in a sustainable conservation focused manner. EU (Quality of Salmonid Waters) Regulations 1988. All works during development and operation of the project must aim to conserve fish and other species of fauna and flora habitat; biodiversity of inland fisheries and ecosystems and protect spawning salmon and trout.	The implementation and compliance with key environmental issues and objectives of this corporate plan will result in positive on-combination effects to European sites. The implementation of this corporate plan will have a positive impact for biodiversity of inland fisheries and ecosystems. It will not contribute to in-combination or cumulative impacts with the proposed works.
Irish Water Capital Investment Plan 2014-2016	Proposals to upgrade and secure water services and water treatment services countrywide.	Likely net positive impact due to water conservation and more effective treatment of water.
Water Services Strategic Plan (WSSP, 2015)	Irish Water has prepared a Water Services Strategic Plan (WSSP, 2015), under Section 33 of the Water Service No. 2 Act of 2013 to address the delivery of strategic objectives which will contribute towards improved water quality and biodiversity requirements through reducing:	The WSSP forms the highest tier of asset management plans (Tier 1) which Irish Water prepare and it sets the overarching framework for subsequent detailed implementation plans (Tier 2) and water services projects (Tier 3).

Plans and Projects	Key Policies/Issues/Objectives Directly Related to the Conservation of the Natura 2000 Network	Impact
	• Habitat loss and disturbance from new / upgraded infrastructure; • Species disturbance; • Changes to water quality or quantity; and • Nutrient enrichment /eutrophication.	The WSSP also sets out the strategic objectives against which the Irish Water Capital Investment Programme is developed. The current version of the CAP outlines the proposals for capital expenditure in terms of upgrades and new builds within the Irish Water owned assets. No long-term in-combination effect on Natura 2000 sites will occur.
NPWS Conservation Management Plans	Conservation Management Plans have not been fully prepared for the European sites being assessed. However, conservation objectives are set for all sites.	The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site. 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. The resultant effects of conservation objectives are a net positive and there is no potential for in combination effects on European sites.
WWTP discharges into Cork Harbour	A number of agglomerations discharge into Cork Harbour including Cork City WWTP, Ballincollig (via River Lee) Carrigtohill and Environs WWTP.	Discharges from municipal WWTPs are required to meet water quality standards. Irish Water Capital Investment Plan proposes to upgrade water treatment services countrywide (see above). No long-term in-combination effect on Natura 2000 sites will occur.
Other developments in the vicinity	A search of developments for Dripsey in the previous 36-month period (from July 2024) was carried out. As well as number of small-scale developments i.e. one-off houses, extensions to existing dwellings etc, the following larger developments were noted.	Future developments will only be granted permission where discharges from same meet with relevant water quality standards.

Plans and Projects	Key Policies/Issues/Objectives Directly Related to the Conservation of the Natura 2000 Network	Impact
	217466. The construction of a residential development of 30 no. units. The development will consist of 4 no. 3 bed townhouses, 3 no. 2 bed townhouses, 18 no. 3 bed semi-detached units, 4 no. 4 bed semi-detached units and 1 no. 4 bed detached unit. The development will also provide for: works to the existing vehicular access from O'Callaghan Place; car parking; lighting; photovoltaic panels; hard and soft landscaping; boundary treatments; and all other works. Development Address Model Village, Deeshart (townland), Dripsey, Co. Cork	Given the nature, extent and scale of the proposed project, it is not anticipated that it will act in-combination with the plans or projects outlined, or other plans or projects, to give rise to in-combination impacts on Cork Harbour SPA.

In the absence of any significant impact associated with this project no in-combination impacts on water quality have been identified. Similarly, no significant in-combination impacts in relation to noise and disturbance have been identified. No other significant in-combination impacts have been identified. There are no projects which could have a potential significant in-combination effect along with the proposed development.

Given the nature, extent and scale of the proposed project, it is not anticipated that it will act in-combination with the plans or projects outlined, or other plans or projects, to give rise to in-combination impacts on the Cork Harbour SPA.

9. Screening conclusion and statement

This AA screening report has been prepared to assess whether the proposed development, individually or in-combination with other plans or projects, and in view of best scientific knowledge, is likely to have a significant effect on any European site(s).

The screening exercise was completed in compliance with the relevant European Commission guidance, national guidance, and case law. The potential impacts of the proposed development have been considered in the context of the European sites potentially affected, their qualifying interests or special conservation interests, and their conservation objectives.

Through an assessment of the source-pathway-receptor model, which considered the ZoI of effects from the proposed development and the potential in-combination effects with other plans or projects, the following findings were reported:

- The proposed development at Millview Terrace, Dripsey, Co. Cork, either alone or in-combination with other plans and/or projects, does not have the potential to significantly affect any European Site, in light of their conservation objectives.

Therefore, a Stage 2 Appropriate Assessment is deemed not to be required.

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NPWS (2014d) *Conservation Objectives: Cork Harbour SPA 004030. Version 1.* National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

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Appendices

Appendix 1 Site synopses

Cork Harbour Special Protection Area (Site Code 004030)

Cork Harbour is a large, sheltered bay system, with several river estuaries - principally those of the Rivers Lee, Douglas, Owenboy and Owennacurra. The SPA site comprises most of the main intertidal areas of Cork Harbour, including all of the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay and the Rostellan and Poulnabibe inlets.

Owing to the sheltered conditions, the intertidal flats are often muddy in character. These muds support a range of macro-invertebrates, notably Macoma balthica, Scrobicularia plana, Hydrobia ulvae, Nepthys hombergi, Nereis diversicolor and Corophium volutator. Green algae species occur on the flats, especially Ulva lactua and Enteromorpha spp. Cordgrass (Spartina spp.) has colonised the intertidal flats in places, especially where good shelter exists, such as at Rossleague and Belvelly in the North Channel. Salt marshes are scattered through the site and these provide high tide roosts for the birds. Salt marsh species present include Sea Purslane (Halimione portulacoides), Sea Aster (Aster tripolium), Thrift (Armeria maritima), Common Saltmarsh-grass (Puccinellia maritima), Sea Plantain (Plantago maritima), Laxflowered Sea-lavender (Limonium humile) and Sea Arrowgrass (Triglochin maritima). Some shallow bay water is included in the site. Cork Harbour is adjacent to a major urban centre and a major industrial centre. Rostellan Lake is a small brackish lake that is used by swans throughout the winter. The site also includes some marginal wet grassland areas used by feeding and roosting birds.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Little Grebe, Great Crested Grebe, Cormorant, Grey Heron, Shelduck, Wigeon, Teal, Pintail, Shoveler, Red-breasted Merganser, Oystercatcher, Golden Plover, Grey Plover, Lapwing, Dunlin, Blacktailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Black-headed Gull, Common Gull, Lesser Black-backed Gull and Common Tern. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

Cork Harbour is an internationally important wetland site, regularly supporting in excess of 20,000 wintering waterfowl, for which it is amongst the top five sites in the country. The two-year mean of summed annual peaks for the entire harbour complex was 55,401 for the period 1995/96 and 1996/97. Of particular note is that the site supports internationally important populations of Black-tailed Godwit (905) and Redshank (1,782) - all figures given are average winter means for the two winters 1995/96 and 1996/97. At least 18 other species have populations of national importance, as follows: Little Grebe (51), Great Crested Grebe (204), Cormorant (705), Grey Heron (63), Shelduck (2,093), Wigeon (1,852), Teal (922), Pintail (66), Shoveler (57), Red-breasted Merganser (88), Oystercatcher (1,404), Golden Plover (3,653), Grey Plover (84), Lapwing (7,688), Dunlin (10,373), Bartailed Godwit (417), Curlew (1,325) and Greenshank (26). The Shelduck population is the largest in the country (over 10% of national total). The site has regionally or locally important populations of a range of other species, including Whooper Swan (10), Pochard (145) and Turnstone (79). Other species using the site include Gadwall (13), Mallard (456), Tufted Duck (113), Goldeneye (31), Coot (53), Mute Swan (38), Ringed Plover (34) and Knot (38). Cork Harbour is a nationally important site for gulls in winter and autumn, especially Black-headed Gull (4,704), Common Gull (3,180) and Lesser Black-backed Gull (1,440).

A range of passage waders occurs regularly in autumn, including such species as Ruff (5-10), Spotted Redshank (1-5) and Green Sandpiper (1-5). Numbers vary between years and usually a few of each of these species over-winter.

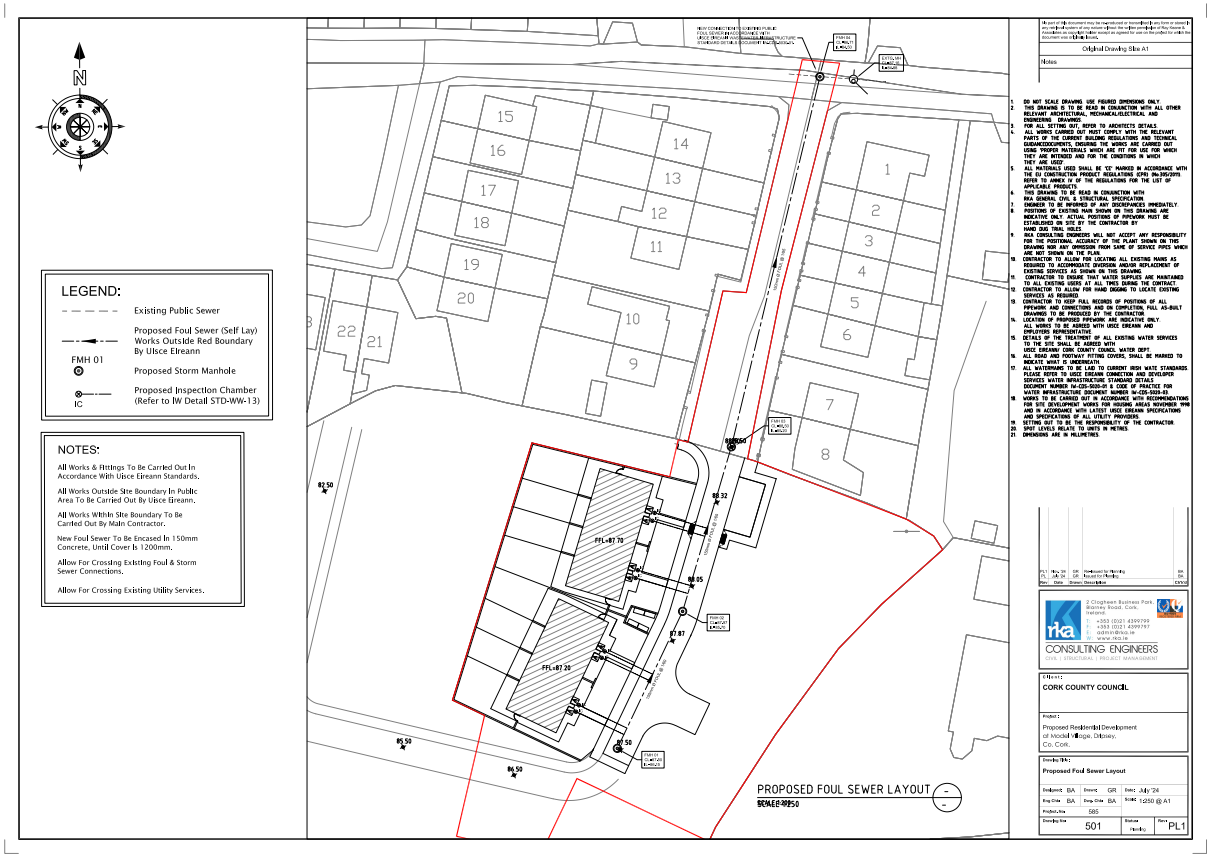
The wintering birds in Cork Harbour have been monitored since the 1970s and are counted annually as part of the I-WeBS scheme.

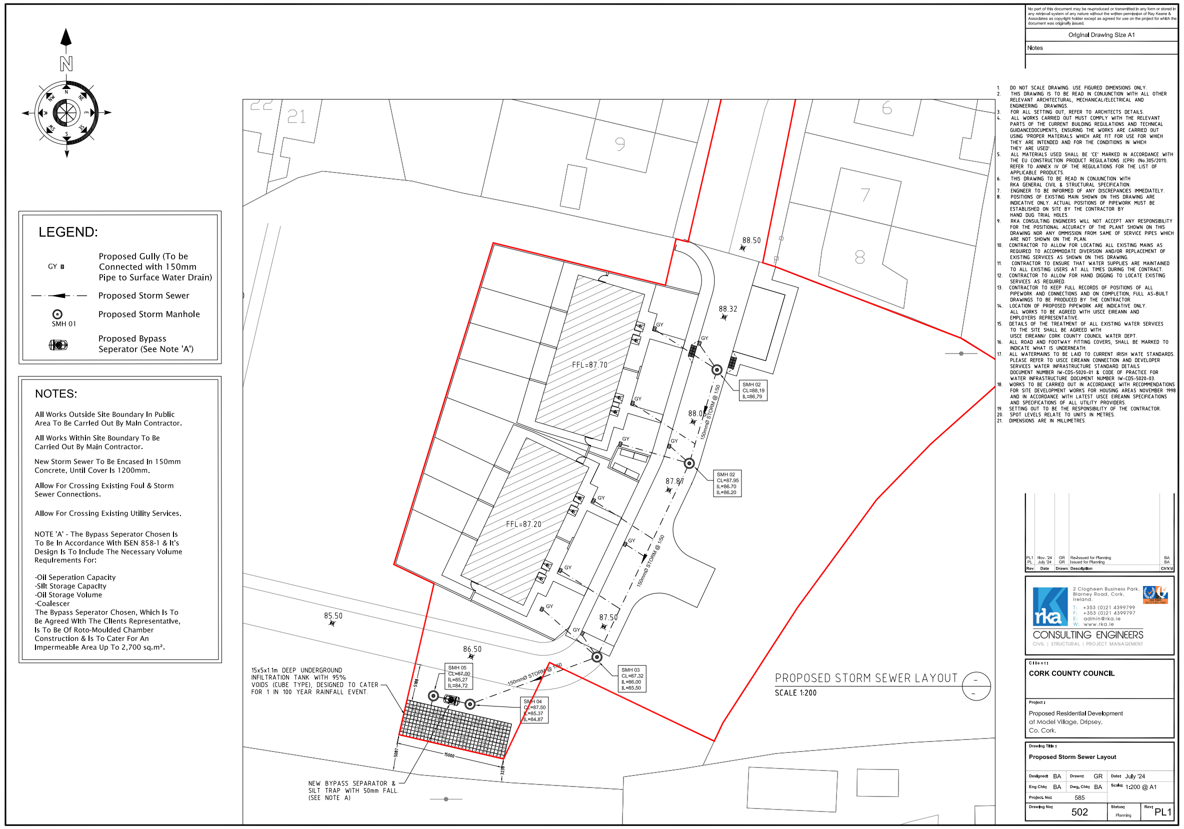
Cork Harbour has a nationally important breeding colony of Common Tern (3-year mean of 69 pairs for the period 1998-2000, with a maximum of 102 pairs in 1995). The birds have nested in Cork Harbour since about 1970, and since 1983 on various artificial structures, notably derelict steel barges and the roof of a Martello Tower. The birds are monitored annually and the chicks are ringed.

Extensive areas of estuarine habitat have been reclaimed since about the 1950s for industrial, port-related and road projects, and further reclamation remains a threat. As Cork Harbour is adjacent to a major urban centre and a major industrial centre, water quality is variable, with the estuary of the River Lee and parts of the Inner Harbour being somewhat eutrophic. However, the polluted conditions may not be having significant impacts on the bird populations. Oil pollution from shipping in Cork Harbour is a general threat. Recreational activities are high in some areas of the harbour, including jet skiing which causes disturbance to roosting birds.

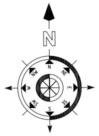
Cork Harbour is of major ornithological significance, being of international importance both for the total numbers of wintering birds (i.e. > 20,000) and also for its populations of Black-tailed Godwit and Redshank. In addition, there are at least 18 wintering species that have populations of national importance, as well as a nationally important breeding colony of Common Tern. Several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Golden Plover, Bar-tailed Godwit, Ruff and Common Tern. The site provides both feeding and roosting sites for the various bird species that use it.

Appendix 2. Site drawings

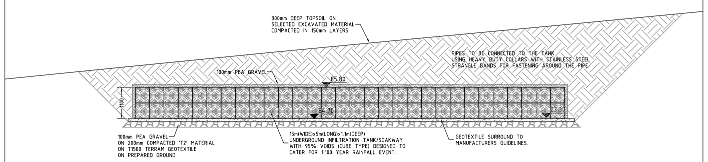

N
LEGEND:
Existing Public Sewer
Proposed Foul Sewer (Self Lay)
Works Outside Red Boundary
By Ulsce Eireann
FMH 01
Proposed Storm Manhole
IC
Proposed Inspection Chamber
(Refer to IW Detail STD-WW-13)
NOTES:
All Works & Fittings To Be Carried Out In Accordance With Uisce Eireann Standards.
All Works Outside Site Boundary In Public Area To Be Carried Out By Uisce Eireann.
All Works Within Site Boundary To Be Carried Out By Main Contractor.
New Foul Sewer To Be Encased In 150mm Concrete, Until Cover Is 1200mm.
Allow For Crossing Existing Foul & Storm Sewer Connections.
Allow For Crossing Existing Utility Services.
PROPOSED FOUL SEWER LAYOUT
SCALE: 1:250
Original Drawing Size A1
Notes:
CONSULTING ENGINEERS
CORK COUNTY COUNCIL
Proposed Residential Development
at Millview Terrace, Dripsey,
Co. Cork.
Proposed Foul Sewer Layout
Scale: 1:250 @ A1
501
PL1



N
LEGEND:
GY
Proposed Gully (To be Connected with 150mm Pipe to Surface Water Drain)
Proposed Storm Sewer
SMH 01
Proposed Storm Manhole
Proposed Bypass Seperator (See Note 'A')
NOTES:
All Works Outside Site Boundary In Public Area To Be Carried Out By Main Contractor.
All Works Within Site Boundary To Be Carried Out By Main Contractor.
New Storm Sewer To Be Encased In 150mm Concrete, Until Cover Is 1200mm.
Allow For Crossing Existing Foul & Storm Sewer Connections.
Allow For Crossing Existing Utility Services.
NOTE 'A' - The Bypass Seperator Chosen Is To Be In Accordance With ISEN 858-1 & It's Design Is To Include The Necessary Volume Requirements For:
-Oil Seperation Capacity
-Silt Storage Capacity
-Oil Storage Volume
-Coalescer
The Bypass Seperator Chosen, Which Is To Be Agreed With The Clients Representative, Is To Be Of Roto-Moulded Chamber Construction & Is To Cater For An Impermeable Area Up To 2,700 sq.m².
FFL=87.70
FFL=87.20
88.50
88.32
87.50
86.50
85.50
15x5x1.1m DEEP UNDERGROUND INFILTRATION TANK WITH 95% VOIDS (CUBE TYPE), DESIGNED TO CATER FOR 1 IN 100 YEAR RAINFALL EVENT.
NEW BYPASS SEPARATOR & SILT TRAP WITH 50mm FALL. (SEE NOTE A)
PROPOSED STORM SEWER LAYOUT
SCALE 1:200
Original Drawing Size A1
Notes
PL1 Nov. '24 GR Re-Issued for Planning BA
PL July '24 GR Issued for Planning BA
Rev Date Drawn Description Ch'k'd
2 Clogheen Business Park, Blarney Road, Cork, Ireland.
T: +353 (0)21 4399799
F: +353 (0)21 4399797
E: admin@rka.ie
W: www.rka.ie
CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT
Client:
CORK COUNTY COUNCIL
Project:
Proposed Residential Development at Model Village, Dripsey, Co. Cork.
Drawing Title:
Proposed Storm Sewer Layout
Designed: BA Drawn: GR Date: July '24
Eng Chk: BA Dwg. Chk: BA Scale: 1:200 @ A1
Project. No: 585
Drawing No: 502 Status: Planning Rev: PL1



NOTE:
INFILTRATION SYSTEM TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.



SECTION THRU' INFILTRATION TANK
SCALE 1:50

Original Drawing Size A1

Notes

1. DO NOT SCALE DRAWING. USE FIGURED DIMENSIONS ONLY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL, MECHANICAL/ELECTRICAL AND ENGINEERING DRAWINGS.
3. FOR ALL SETTING OUT, REFER TO ARCHITECTS DETAILS.
4. ALL WORKS CARRIED OUT MUST COMPLY WITH THE RELEVANT PARTS OF THE CURRENT BUILDING REGULATIONS AND TECHNICAL GUIDANCEDOCUMENTS, ENSURING THE WORKS ARE CARRIED OUT USING 'PROPER MATERIALS WHICH ARE FIT FOR USE FOR WHICH THEY ARE INTENDED AND FOR THE CONDITIONS IN WHICH THEY ARE USED'.
5. ALL MATERIALS USED SHALL BE 'CE' MARKED IN ACCORDANCE WITH THE EU CONSTRUCTION PRODUCT REGULATIONS (CPR) (No.305/2011). REFER TO ANNEX IV OF THE REGULATIONS FOR THE LIST OF APPLICABLE PRODUCTS.
6. THIS DRAWING TO BE READ IN CONJUNCTION WITH RKA GENERAL CIVIL & STRUCTURAL SPECIFICATION.
7. ENGINEER TO BE INFORMED OF ANY DISCREPANCIES IMMEDIATELY.
8. POSITIONS OF EXISTING MAIN SHOWN ON THIS DRAWING ARE INDICATIVE ONLY. ACTUAL POSITIONS OF PIPEWORK MUST BE ESTABLISHED ON SITE BY THE CONTRACTOR BY HAND DUG TRIAL HOLES.
9. RKA CONSULTING ENGINEERS WILL NOT ACCEPT ANY RESPONSIBILITY FOR THE POSITIONAL ACCURACY OF THE PLANT SHOWN ON THIS DRAWING NOR ANY OMMISSION FROM SAME OF SERVICE PIPES WHICH ARE NOT SHOWN ON THE PLAN.
10. CONTRACTOR TO ALLOW FOR LOCATING ALL EXISTING MAINS AS REQUIRED TO ACCOMMODATE DIVERSION AND/OR REPLACEMENT OF EXISTING SERVICES AS SHOWN ON THIS DRAWING.
11. CONTRACTOR TO ENSURE THAT WATER SUPPLIES ARE MAINTAINED TO ALL EXISTING USERS AT ALL TIMES DURING THE CONTRACT.
12. CONTRACTOR TO ALLOW FOR HAND DIGGING TO LOCATE EXISTING SERVICES AS REQUIRED.
13. CONTRACTOR TO KEEP FULL RECORDS OF POSITIONS OF ALL PIPEWORK AND CONNECTIONS AND ON COMPLETION, FULL AS-BUILT DRAWINGS TO BE PRODUCED BY THE CONTRACTOR.
14. LOCATION OF PROPOSED PIPEWORK ARE INDICATIVE ONLY. ALL WORKS TO BE AGREED WITH UISCE EIREANN AND EMPLOYERS REPRESENTATIVE.
15. DETAILS OF THE TREATMENT OF ALL EXISTING WATER SERVICES TO THE SITE SHALL BE AGREED WITH UISCE EIREANN/ CORK COUNTY COUNCIL WATER DEPT.
16. ALL ROAD AND FOOTWAY FITTING COVERS, SHALL BE MARKED TO INDICATE WHAT IS UNDERNEATH.
17. ALL WATERMAINS TO BE LAID TO CURRENT IRISH WATE STANDARDS. PLEASE REFER TO UISCE EIREANN CONNECTION AND DEVELOPER SERVICES WATER INFRASTRUCTURE STANDARD DETAILS DOCUMENT NUMBER IW-CDS-5020-01 & CODE OF PRACTICE FOR WATER INFRASTRUCTURE DOCUMENT NUMBER IW-CDS-5020-03.
18. WORKS TO BE CARRIED OUT IN ACCORDANCE WITH RECOMMENDATIONS FOR SITE DEVELOPMENT WORKS FOR HOUSING AREAS NOVEMBER 1998 AND IN ACCORDANCE WITH LATEST UISCE EIREANN SPECIFICATIONS AND SPECIFICATIONS OF ALL UTILITY PROVIDERS.
19. SETTING OUT TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
20. SPOT LEVELS RELATE TO UNITS IN METRES.
21. DIMENSIONS ARE IN MILLIMETRES.

Rev	Date	Drawn	Description	Ch'k'd
PL	July '24	GR	Issued for Planning	BA

2 Clogheen Business Park,
Blarney Road, Cork,
Ireland.
T: +353 (0)21 4399799
F: +353 (0)21 4399797
E: admin@rka.ie
W: www.rka.ie

CONSULTING ENGINEERS
CIVIL | STRUCTURAL | PROJECT MANAGEMENT

Client:
CORK COUNTY COUNCIL

Project :
Proposed Residential Development
at Model Village, Dripsey,
Co. Cork.

Drawing Title :
Proposed Typ. Section Thru' Filtration Tank

Designed: BA	Drawn: GR	Date: July '24	
Eng Chk: BA	Dwg. Chk: BA	Scale: 1:50 @ A1	
Project. No: 585			
Drawing No: 503		Status: Planning	Rev: PL